

*26th Annual Report of the*

**PACIFIC MARINE  
FISHERIES COMMISSION**

**FOR THE YEAR 1973**

**TO THE CONGRESS OF THE UNITED STATES AND  
TO THE GOVERNORS AND LEGISLATURES OF  
WASHINGTON, OREGON, CALIFORNIA, IDAHO,  
AND ALASKA**

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# PACIFIC MARINE FISHERIES COMMISSION

FOR THE YEAR 1973

To the Congress of the United States and the Governors and Legislatures of the Five Compacting States, Washington, Oregon, California, Idaho and Alaska, by the Commissioners of the Pacific Marine Fisheries Commission in Compliance with the State Enabling Acts Creating the Commission and Public Laws 232; 766; and 315 of the 80th; 87th; and 91st Congresses of the United States Assenting Thereto.

Respectfully submitted,  
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# CONTENTS

	PAGE
Introduction .....	3
International .....	3
National .....	5
PMFC and Local Events .....	7
Administration.....	10
Personnel.....	10
Conferences and Meetings .....	11
Administrative and Service Activities .....	11
Commission Actions.....	17
Action on 1972 Resolutions.....	17
General Actions at the 1973 Annual Meeting.....	21
1973 Resolutions .....	22
Support for the United States Position at the Law of the Sea Conference for Management of Ocean Fisheries, and Other Fisheries Protection Measures .....	22
Ownership Status of U.S. Flag Fishing Vessels .....	22
Protection of Anadromous Fish Resources in International Waters.....	23
Recommend Establishment of Coastwide Uniform Commercial Fishing Fees .....	23
Development of Fish Cultural Facility Effluent Standards . . .	23
Support Concept of Compensation for Fish Production Potential of Habitat.....	24
Objectives for Management of Chinook and Coho Salmon Resources.....	24
Concerning Necessity for Maintaining Position of Special Assistant for Fisheries and Wildlife to the Secretary of Stater: . • .....	25
Support for the State of Idaho Position on Reclassification and Enlargement of Idaho Primitive Area and Salmon River Breaks Primitive Area .....	25
Request for Maintenance of Fuel Supply to the United States Fishing Industry .....	25
Election of Officers; 1974 Meeting Location .....	26
Financial and Audit Reports.....	26
Financial Support, 1973.....	26
Revised Biennial Budget, 1973-75.....	27
Audit Report .....	27
Balance Sheet, June 30, 1973.....	27
Appendix 1 — Status Reports .....	28
Status of the 1973 Pacific Coast Albacore Fishery .....	28
Status of the 1973 Pacific Coast Shrimp Fishery .....	30
Status of the 1973 Pacific Coast Groundfishery .....	32
Status of the 1972-73 Pacific Coast Dungeness Crab Fishery ..	35
Status of the 1973 Pacific Coast Troll Salmon Fishery .....	36
Status of the 1972 Salmon and Steelhead Sport Catches in the Pacific Coast States.....	38
Appendix 2 — Summary of Panel on Columbia River Salmonid Fisheries — Status and Future Prospects.....	40

# 26th Annual Report - 1973

## International

The Food and Agriculture Organization of the United Nations held a conference on fishery management and development at Vancouver, B.C., from 13-23 February, 1973, which was participated in by over 300 experts from throughout the world. Some 50 nations and 11 international commissions were represented. PMFC's Executive Director was a member of the U.S. delegation. The Government of Canada hosted the conference and published the complete proceedings through its Department of the Environment and its Fisheries Research Board of Canada (see "FAO Technical Conference on Fishery Management and Development," Journal of Fisheries Research Board of Canada, vol. 30, no. 12, part 2 of 2 parts, December 1973, pages 1921-2537). Reports of the technical sessions and recommendations were published in "Report of the Technical Conference on Fishery Management and Development, Vancouver, Canada, 13-23 February 1973" (see FAO Fisheries Reports No. 134, Rome, May 1973, 78 pages).

The 20th Annual Meeting of the International North Pacific Fisheries Commission (INPFC) was held in Tokyo from October 22 to November 9. Approximately the first two weeks were devoted to scientific sessions and the last week to plenary sessions. The Commissioners from the three contracting countries, Canada, Japan and the United States, assisted by approximately 100 administrators, scientists, and industry advisors, reviewed the results of conservation and scientific research on North Pacific fishery resources and discussed primarily the general problem of orderly development and maintenance of maximum sustained yields from the resources. Consultants from the International Pacific Halibut Commission assisted in certain of the discussions.

INPFC recommended to the contracting countries that the abstention provisions of the convention remain unchanged for 1974. It also adopted a resolution recommending that the contracting governments give full consideration to the conservation needs of salmon stocks in areas of intermingling when preparing regulations for future operations and that the regulations should take into consideration the effects on conservation of patterns of fishing activities. No agreement was reached on conservation measures for halibut in the eastern Bering Sea, although recommendations for such measures have been made annually since 1963. The 1974 annual meeting will be held in Seattle beginning November 4.

Foreign distant-water fishing fleets continued to cause grave concern to U.S. domestic fishermen, especially those from New England States and Alaska, Washington, Oregon and the north-

ern part of California. The Japanese, Soviet and South Korean fleets in the eastern Bering Sea and off the West Coast were joined by vessels from other countries in 1973. On August 15, the East German stern trawler, *PETER NELL* began operating with the Soviet fleet off Oregon and about September 3 the Polish stern trawler, *HUMBAK*, joined the fishing off Oregon. A fleet of 6 to 10 Polish stern trawlers is expected off Washington, Oregon and California in 1974.

In addition to the severe drain on West Coast fishery resources caused by foreign fishing, the domestic fishermen are also concerned about safety for themselves and their smaller vessels while fishing in areas where the larger foreign vessels are operating. On July 13 two Soviet BMRT stern trawlers collided in the fog off southern Oregon. The *SEZD VLKSM* sank without loss of life and the *NAKHODKA* had to be towed into Coos Bay, Oregon for temporary repairs to its bow.

U.S. Coast Guard patrols accompanied by observers from the National Marine Fisheries Service apprehended a number of foreign fishing vessels in violation of U.S. fishing laws off the Pacific Coast of the United States in 1973. International concern about fishery management is reflected in the increasing severity of fines levied against violators, as demonstrated in the following actions.

On May 29, three Japanese high-seas gillnet vessels were observed, by an air patrol, fishing for salmon about 150 miles south of the Shumagin Islands or over 600 miles east of the abstention line. The vessels abandoned their gillnets and fled southward. The nearest Coast Guard cutter was over 600 miles away, precluding seizure of the offenders. The air patrol marked the location of the nets which were subsequently retrieved by two Coast Guard cutters. The Japanese patrol vessel *TOKO MARU*, some 1,200 miles away, was advised of the violation. On June 2, the *TOKO MARU* intercepted the fleeing vessels and escorted them to Cold Bay, Alaska to rendezvous with the Coast Guard to accept custody of the abandoned nets and documentation of the violations, as under the INPFC treaty each member nation prosecutes its own offending nationals and vessels.

On July 12, the stern trawler *ASO MARU* was seized for fishing halibut and salmon illegally and was turned over to Japanese authorities in Kodiak for prosecution.

In mid-July, the South Korean stern trawler *DONG BANK No. 71* was arrested for fishing in the contiguous zone off Alaska. The vessel was fined \$80,000 and her master was fined \$20,000

of which \$10,000 was suspended on condition he not violate U.S. fishery laws within the next two years.

On September 15, the Japanese stern trawler, *MITSU MARU No. 30* was apprehended fishing in the contiguous zone north of Akutan Island and was arrested after a 1 3-hour chase over a 140-mile distance. The *MITSU's* master pleaded guilty in U.S. District Court, Anchorage and was fined \$30,000. A civil suit against the vessel was settled for \$200,000. The total \$230,000 fine was twice that levied on the previous Japanese vessel apprehended for fishing within the contiguous zone on November 1, 1971.

Soviet fishery and oceanography officials and fishermen met with local U.S. federal and state agency officials and fishermen at a number of West Coast locations during 1 973 in accordance with existing bilateral agreements between the Soviet Union and the United States, which were extended in February for two years. On May 1, a meeting took place on the Coast Guard cutter *CONFIDENCE* in Womens Bay, Kodiak Island, just prior to the May 10 opening of the halibut fishing season in that area. The purpose of the meeting was to avoid gear conflicts between foreign trawlers and domestic halibut and crab fishermen.

On July 20 and September 1 9, meetings were held at Port Angeles, Washington to discuss local problems that had arisen, such as: gear conflicts, alleged harassment of small fishing vessels, actions of the US-USSR Fisheries Claims Board, and conservation of hake, salmon and rockfish. On November 16, a 6-member oceanographic party from the Soviet vessel *ALTAIR*, in response to an invitation, visited the Moss Landing Marine Laboratories of the California State University and College system. The *ALTAIR* is a 1 90-foot vessel-rigged for seismic sounding, meteorological and hydrographic observations, and was moored in San Francisco Bay at the time.

As the result of discussions between American and Russian personnel when the Soviet research vessel *SESKAR* made a port call at Portland, Oregon on June 27 and 28, arrangements were made for an exchange of observers during cruises of the *SESKAR* and the American research vessel *COMMANDO* off the West Coast. Groundfish biologists Bob Demory of the Fish Commission of Oregon and Don Gunderson of the Washington Department of Fisheries were aboard the *SESKAR* from August 1 7 to September 1 when they were relieved by Tom Jow of the California Department of Fish and Game until about September 1 5. Mr. Jow on November 1 5 at the annual PMFC meeting in Boise reported on his observations aboard the *SESKAR* from off Vancouver Island to Central California.

The dates for the United Nations' Law of the Sea Conference at Caracas, Venezuela are June 20 to August 29, 1974. Some of the issues that will concern representatives from approximately 140 countries during the 10-week conference are:

1. Fishing limits or jurisdictional zones;
2. Rights of oceanographic research vessels to freely roam the seas, collecting data regardless of zone width;
3. Exclusive rights for a nation to mine minerals and drill

for oil on the adjacent continental shelf, or a plan to allow all nations to share mutually in at least part of the mineral wealth that is actually extracted; and

4. International commission to control the right to mine deep seabed (in contrast to continental shelf areas), the rate of exploitation, and the distribution of profits. A second Law of the Sea Conference is already being mentioned for Vienna in 1 975.

Canada is calling for 200-mile fisheries jurisdiction or to the edge of the continental shelf, whichever is greater. Canada is also studying the possible closure of its ports to foreign fishing fleets.

Canada and the United States on June 1 5 signed a bilateral agreement extending for one year the 1970 fishery agreement, except for certain modifications. The major modification was in regard to fishing by West Coast commercial salmon trollers within the 3- to 12-mile zone off Washington and the west coast of Vancouver Island. Canadian trollers formerly could fish within the 3- to 1 2-mile zone as far south as the Columbia River, but now they can only fish in that zone north of Carroll Island, approximately 48° N. latitude. American trollers could formerly fish within the zone for the entire length of Vancouver Island, but now they cannot fish in the zone north of a small area off the entrance to the Strait of Juan de Fuca. Both countries are continuing to review salmon management problems.

The Legislature of the State of Oregon passed a 50-mile exclusive fishing zone law, which Governor McCall vetoed but early in 1974 the Legislature overrode the Governors veto. Massachusetts has a 200-mile zone on its statute books. These state fishing zones raise questions about their legality and enforceability against foreign fishermen.

Congress, in response to the general concern about exploitation of fishery resources off the United States by foreign fishing fleets and the possibility that the 1 974 Law of the Sea Conference may not settle the question of width of fishery zones, now has before it as interim measures two companion bills (S. 1 988 and H.R. 9137) among others to extend the U.S. fishery zone to 200 miles offshore and to protect anadromous fishes from high-seas fishing until such time as these matters are settled by international agreement. S. 1 988 was introduced by Senator Warren G. Magnuson on June 13, and H.R. 9137 was introduced by Congressman Gerry E. Studds on June 29. The Subcommittee on Oceans and Atmosphere of the Senate Committee on Commerce has begun hearings on the proposed legislation.

A proposal for support of S. 1988 was submitted for consideration as a resolution at PMFC's 1973 Annual Meeting in Boise, Idaho. After extensive review and debate, PMFC's Advisors and Commissioners were unable to agree on the issue. Consequently, the Commission voted to refer the proposal to its member States for independent action at the discretion of each.

PMFC's long-term concern for international fishery affairs is reflected by similar resolutions, in three successive years,

relating to Law of the Sea negotiations. In 1971 PMFC adopted a resolution in support of fisheries management by coastal, anadromous, and high seas groupings (a species basis). In 1972 it adopted a second resolution endorsing the species approach or basis and urging the United States to continue its efforts to have that approach considered at the coming Law of the Sea Conference. This second resolution was reaffirmed unanimously at PMFC's 1973 meeting (see Resolution No. 1, page 22).

There were a number of changes in 1973 among U.S. fishery personnel assigned to international matters. Clinton E. Atkinson, who served as U.S. Fishery Attache at Tokyo since April 1966, retired from federal service effective December 31, 1973. He and his wife now reside in Seattle where he is consulting on international fisheries. Larry M. Nakatsu, a career employee of the National Marine Fisheries Service (NMFS), is the new Attache at Tokyo. Donald L. McKernan, Coordinator for Ocean Affairs and Special Assistant for Fisheries and Wildlife to the Secretary of State, with the rank of Ambassador, resigned to become the University of Washington's first director of its Institute for Marine Studies effective January 1974. He also became a professor of fisheries and a member of the University's Marine Affairs Board. See Resolution No. 13 on page 25 regarding fishery representation in Department of State. William M. Terry, Director of the Office of International Affairs in the National Oceanic and Atmospheric Administration (NOAA) was killed in an accident on May 6, 1973. He was also a U.S. Commissioner on the International Commission for the Northwest Atlantic Fisheries and on the Inter-American Tropical Tuna Commission. Secretary of Commerce Frederick B. Dent posthumously awarded Mr. Terry the Department's highest honor, its gold medal, for his leadership, unique knowledge and experience in international affairs.

## National

The energy crisis and the environment were important items in the news in 1973. The National Wildlife Federation, the nation's, largest conservation organization, chose the Honorable Tom McCall, Governor of the State of Oregon, as "Conservationist of the Year." In announcing the award, the Federation said Governor McCall was chosen "for his strong leadership and foresight in a number of statewide conservation programs, which have made Oregon an environmental bellwether of the nation."

In response to concern that the fishing industry might be hampered in its harvest of fish and other seafoods because of the energy crisis, PMFC adopted Resolution No. 15 urging that fuel be made available for the fishing fleet throughout its range and that in the event of national rationing that the fishing industry be given highest priority (see Resolution on page 25).

The National Water Commission, which was established in 1968 to study present and anticipated national water resource problems and to make recommendations for future water policy, transmitted its final report to the President and Congress on June 14. Hearings on the report were begun June 28 by the Water and Power Resources Subcommittee of the Senate Committee on Interior and Insular Affairs. Among the more contro-

versial portions of the report were the Commission's recommendations on interbasin transfers of water, Indian water rights, user charges on inland waterways, repayment of the costs of federal flood control and irrigation projects by the beneficiaries, and the zero-discharge goal expressed in the Federal Water Pollution Act Amendments of 1972.

The Commission also on June 28 held its final meeting in Washington, D.C.; announced that its offices were being closed on June 30; and approved a 200-page summary of its full report, which would be printed and forwarded to the President and Congress. Subsequent communications should be addressed to the Water Resources Council, 2120 L Street N.W., Washington, D.C. 20037. The statutory termination of the Commission was not later than September 26, 1973. The Water Resources Council is required to send the President and Congress its views on the report, and the President is to transmit the Commission's final report to Congress with comments and recommendations for legislation he deems appropriate.

A conference on Oceans and National Economic Development was sponsored by NOAA of the U.S. Department of Commerce and was held in Seattle from July 17 through 19. Some 630 fishermen, fishery operators, economists, scientists, and public office holders registered at the conference which embraced six specific topics:

1. The Ocean's Energy and Mineral Resources;
2. The Ocean's Living Resources;
3. The Ocean as a Recreational Resource;
4. Coastal Zone Management and Marine Resource Development;
5. Regional Organization and Economic Development of Marine Resources;
6. Marine Transportation's Role in Meeting Energy Needs.

Senator Magnuson was the keynote speaker. Harold E. Loken, Manager of the Fishing Vessel Owners Association, Seattle, and Commissioner of PMFC, was the sole advocate of producing fishermen among the scheduled speakers. He stated full national commitment to fisheries is a first prerequisite and believes there is consensus among fishermen on the following:

1. Government must recognize the unique character of the fishing enterprise. The fisherman is not like the farmer who owns the resource he harvests; not like the factory worker protected by union parity (Our fishermen must compete with those from other nations who are not subject to the same rules and economic constraints.); and is not like the merchant mariner, since most fishing is by the lay (profit sharing) system.
2. Why can foreign-harvested fish be marketed in this country when their taking is illegal for U.S. fishermen?
3. Why do we tolerate sanitation laws that do not work, and only advance costs?
4. We must conserve resources, and not permit biologic or economic depletion.
5. We must act on management matters without waiting

necessarily for total scientific proof on the issues concerned.

6. We must support continuous research endeavors, and not permit their interruption as in the present deactivation of NOAA vessels and dissipation of specialized staffs.

G. Ray Arnett, Director of the California Department of Fish and Game, and member of PMFC's Executive Committee, spoke on State-Federal Relations in Marine Recreation. He outlined briefly California's organization and objectives, and its recent activities to develop with NMFS a cooperative investigation of selected saltwater sport fish species. This includes full recognition of the need to improve recreational fishery data systems. He also stressed two policy considerations: 1. Management agencies should concentrate on management of the resource, not on its allocation. Recreational and commercial fisheries both benefit when a resource is managed well. 2. The Federal Government must support regional fishery management efforts through necessary negotiations with foreign governments to assure proper international sharing of resources concerned.

For further information on the Conference see PMFC Newsletter No. 19, October 1973.

In November 1973, Dr. Robert M. White, Administrator of NOAA, announced that NMFS would develop a National Fisheries Plan (NFP). The announcement was in response to recommendations, from the National Advisory Committee on Oceans and Atmosphere, that in addition to the proposed High Seas Conservation Bill and the State-Federal Fisheries Management Program a plan was needed with a national goal of increasing the annual U.S. domestic food-fish catch by one billion pounds by 1980. The target date for completion of a draft of the Plan is December 1974.

It is intended that the NFP will be a complete plan for U.S. fisheries, developed in cooperation with other concerned federal agencies, state fishery agencies, interstate marine fishery commissions, and recreational and commercial fishing and processing industries. It should be a truly National rather than a NMFS Plan which would, identify actions that might be taken to rehabilitate U.S. fisheries, to increase recreational opportunities and to maintain or increase the supply of fishery products as an enjoyable and highly nutritious contribution to the U.S. diet. The Plan would identify the agencies (State or Federal) and the industry groups which appropriately could carry out necessary actions. Its development is divided into five phases: 1) establish clearly the policy (goals and objectives) for the Plan, 2) review the problems and potentials of U.S. fisheries and recommend programs to address these on the basis of careful analysis of costs and benefits, 3) select between alternative programs, 4) review and obtain approval for the selected Plan, and 5) implement the Plan.

The University of California was selected in 1973 as the Nation's seventh Sea Grant College, and was awarded \$1.2 million for a 12-month Sea Grant Program involving coastal zone management, fisheries, ocean engineering, and marine product development. The other six Sea Grant Colleges are the University of Washington, University of Rhode Island, Oregon State University, Texas A & M University, University of Wisconsin, and

the University of Hawaii. Over 120 schools are involved in more than 700 marine-related projects of the National Sea Grant Program.

During 1973, there were many changes in personnel on the national and local scene that were of interest to PMFC. Many of those changes were reported in PMFC's Newsletter No. 19, in October, but two subsequent changes and two of the previously reported changes will be mentioned here.

The death of Thomas M. Pelly in late 1973, less than one year after his retirement from Congress in 1972 was especially sad news. Mr. Pelly had a long and distinguished career as the State of Washington's Congressman from its First District for 20 years and as the ranking Republican on the House Merchant Marine and Fisheries Committee. His experience in fishery, merchant marine and governmental matters was highly regarded on the Pacific Coast and throughout the Nation. We will miss his counsel.

Lynn A Greenwalt, a career employee of the Fish and Wildlife Service was appointed Director of the Bureau of Sport Fisheries and Wildlife in October. He succeeded Spencer H. Smith who requested reassignment for personal reasons.

Philip M. Roedel, Director of NMFS, was appointed on May 2 to the newly established position in NOAA of Coordinator of Marine Recreation Programs. PMFC was fortunate to have Mr. Roedel attend its annual meeting in Boise, Idaho where he described at a luncheon on November 15 his new duties and NOAA's program for marine recreation. He also mentioned that he was involved in Law of the Sea fishery matters and that the United States in August at one of the preconference meetings in Geneva proposed immediate provisional ratification and implementation of fisheries provisions from the coming Law of the Sea Conference instead of waiting for the time consuming process of formal ratification. The same procedure had been proposed earlier for the deep seabed regime, and the concept appears to have broad support.

Robert W. Schoning was appointed acting Director of NMFS following Mr. Roedel's assignment to the new NOAA position. Mr. Schoning was officially appointed Director of NMFS on July 12, 1973.

National fishery statistics for 1973 are not yet available but according to the 1972 statistics (see *Fisheries of the United States, 1972*, NMFS, Current Fisheries Statistics No. 6100, March 1973) shrimp with a value of \$193.2 million were the most valuable fishery resource in 1972; tuna with a value of \$89.9 million were second; and Pacific salmon with a value of \$62.8 million were third. Among the 13 leading States in value of fish landed in 1972, California was first at \$92 million, Alaska was third at \$81 million, Washington was seventh at \$38 million, and Oregon was tenth at \$24 million. Among the 19 leading ports in terms of poundage and value of fish landed, San Pedro, California was first both in poundage and value with 452.4 million pounds worth \$59.0 million. Kodiak, Alaska was seventh in poundage and sixth in value with 119.1 million pounds worth \$15.3 million. San Diego, California was ninth

in poundage but fifty in value with 72.1 million pounds worth \$15.9 million.

Adak, Alaska became the site of the furthest west fishery plant in the United States when Adak Aleutian Processors, Inc., in November opened its new plant which can freeze 15 tons of product every 10 hours and can hold up to 50 tons in cold storage. The plant's fishery products will be marketed in Japan and in the States of Hawaii and Washington.

## PMFC and Local Events

The Pacific Marine Fisheries Commission held its 26th Annual Meeting on November 14 and 15, 1973 in Boise, Idaho. At the first plenary session, Chairman Joseph C. Greenley, Director of the Idaho Fish and Game Department, introduced the Honorable Cecil D. Andrus, Governor of the State of Idaho, who welcomed PMFC.

"On behalf of the people of the State of Idaho I welcome the Pacific Marine Fisheries Commission and each of you as individuals to Boise, Idaho. We hope that your Annual Meeting will be worthwhile and productive since we recognize fully that our ocean fishery resources cannot meet the human demands upon them without well coordinated and intelligent efforts by agencies, industries, and sport users.

"Our State of Idaho may not be the first among those represented here either in size or in population, and being the only inland State member of PMFC, we may at times be regarded as something less than a full-fledged member of the Pacific Marine Fisheries Commission. Nevertheless, we are extremely proud and very aware of our contribution to PMFC's area of interest and of our role in production of anadromous fishes.

"Sea-going fish produced in Idaho waters are important to the ocean commercial fisheries and the sport fisheries from the mouth of the Columbia River to the headwaters of the Salmon River.

"It has been a real challenge to meet the threats to our salmon and steelhead stocks, but I feel that we are making progress and setting some good precedents. Visitors to our State often comment on the abundance of clean water in our beautiful rivers. You gentlemen know that is only because we have clear flowing streams that we have any salmon and steelhead at all. My office has been active in efforts to insure that our rivers will remain salmon and steelhead producers. We have taken a strong stand that much of the lands vital to the watershed of the Salmon River, and particularly the Middle Fork, be administered by the U.S. Forest Service as Wilderness, and thereby maintained as suitable salmon and steelhead habitat forever. In fact, the position of my office has been much stronger than the Forest Service's position for protection of vital watershed lands. I asked for Wilderness classification for 300,000 acres more than recommended by the Forest Service. I opposed exclusion of two major areas in the Middle Fork Salmon River drainage from Wilderness classification. These areas, totaling 62,000 acres, are in prime salmon and steelhead spawning and rearing habitat and could be threatened by improper use.

"I supported the Forest Service's recommendation for inclusion of the Salmon River from North Fork downstream under the Wild and Scenic Rivers Act. This could give additional protection to 237 miles of the Salmon River all of which are used by spring and summer chinook salmon and summer steelhead.

"I believe it would be appropriate that we join together in this protection of our anadromous fisheries and I urge that the Pacific Marine Fisheries Commission offer testimony in support of reclassification of the Idaho Primitive Area and Salmon River Breaks Primitive Area to Wilderness, and in support of classification of the Salmon River under the Wild and Scenic Rivers Act. I suggest to you that if it is not so classified and so protected the people downstream are going to suffer every bit as much as we would. The United States Forest Service has scheduled important hearings on these issues for the last week of this month.

"I have strongly supported Federal legislation pending to guarantee that the Snake River from Hells Canyon Dam to Lewiston be preserved in a free-flowing state and that the authorized construction of Asotin Dam on the Snake River be de-authorized by Congress.

"Although the impacts upon our Columbia River and Snake River anadromous fishes have been staggering and complex, we, in Idaho, will not be satisfied with anything less than restoration of the fish runs to at least former levels. By that I mean runs of adult fish all the way into Idaho waters and not lost somewhere along the way between the dams. These fish runs are a part of our way of life in Idaho, and we will go the greatest lengths to maintain them.

"Results of ongoing efforts to re-establish chinook salmon into the Clearwater drainage are promising. The first salmon fishing season in many, many years was allowed on the Clearwater River just this year.

"Although Idaho's efforts to gain representation on the Columbia River Compact have been unsuccessful so far, we are not through trying. We feel that the existing Compact, established in 1918, is outdated and should include representation of the State of Idaho and of the sport fisheries of Oregon and Washington. Our argument is simple. As an example, the harvest of upriver spring chinook in the Columbia River was 143,000 fish in 1972. The ocean-caught harvest, both sport and commercial, is unknown. Idaho produces 56 percent of the upriver spring chinook run, but our share of the harvest is only 4.5 percent.

"The story has been much the same for summer steelhead. Idaho produces 55 percent of the Columbia River run, but in 1972 Idaho shared in only 17 percent of the harvest. By virtue of the amount of Columbia River fish we produce, are we not entitled to a voice in the regulatory management of our own stocks? We hope to see a judgment made in this matter based upon fairness and good faith and not on vested interest. We feel that we are responsible for a major share of the anadromous fishery that we enjoy in the Pacific Northwest, and frankly we are entitled to an equal voice in determining how the fishery will be managed.



"The items I have mentioned are ones which we feel are critical to the well being of Idaho's anadromous fish stocks. We appreciate very much the support given by Federal and downriver agencies in maintenance of these stocks and I urge that we all work together even more closely.

"Keep in mind that healthy stocks in upriver streams mean the the same in the lower Columbia and the ocean. Without us up here you would not enjoy the runs that you enjoy downstream. So I say to you, give us the opportunity to continue to participate, take advantage of our habitat and our expertise, but give us a voice in the deliberations.

"Welcome to Boise, Idaho; enjoy your stay!"

\* \* \*

The *SEAFREEZE PACIFIC* was purchased by Pan-Alaska Fisheries, Inc., from the Federal Government, early in 1973 and was renamed the *ROYAL SEA*. Plans are to use the vessel in Bering Sea to process pollock and other bottomfish, however, the new owner has asked NOAA for permission to use the vessel also to process snow crabs (*Chinocetes bairdii* and *C. opilio*) in Bering Sea.

The U.S. and Japanese governments in August approved the sale of Whitney-Fidalgo Seafoods, Inc., to Kyokuyo Co., Ltd., a Japanese corporation. Subsequently, the Director of NMFS via the *Federal Register* of October 31 asked for views on an interim policy on foreign control of fish harvesting segments of the fishing industry. These two events resulted in adoption by PMFC of Resolution No. 3 regarding majority alien ownership of U.S. flag vessels (see page 22).

Seattle's Norwegian Commercial Club on December 6 passed a resolution proposing development of a model fish market to be included in plans for Seattle's central waterfront in regard to the Shoreline Management Act of 1971. The resolution urges development of a living fish market "*Levende Fisketorget*" fashioned after one at Bergen, Norway, Seattle's sister city.

The following local personnel changes in 1973 were not mentioned in PMFC's Newsletter No. 19 of October. Of Ernest L. Brannon was appointed to the University of Washington's faculty to succeed Dr. Lauren R. Donaldson who retired in June after 40 years with the University's College of Fisheries. Clifford J. Burner retired during the summer from NMFS after 35 years of government service. He was secretary for the U.S. Section of INPFC.

**Alaska:** Don Young of Fort Yukon, the winner of a special election to fill the vacancy left by the loss of Congressman Nick Begich in an airplane flight, was sworn in on March 14, 1973 as Alaska's member of the U.S. House of Representatives. The State of Alaska began a second attempt to initiate a "limited entry" program for its fisheries. As a first step some 1,377 commercial fishermen had purchased a total of 3,898 "Interim-Use Permits" as of January 1, 1974. Crewmen are not required to purchase permits but gear operators are. The Alaska Department of Fish and Game's new fish hatchery at Crystal Lake near Petersburg began operation in 1973 and is expected to release 800,000 chinook and coho salmon smolts in 1974. The NMFS

is studying the potential of a domestic fishery for pollock in the Gulf of Alaska. Current estimates are that the Gulf stocks could sustain an annual catch of about 55 million pounds.

The total inshore run of red or sockeye salmon to Bristol Bay in 1973 was a disasterously low 2.4 million fish. The University of Washington's Fisheries Research Institute estimates that the 1974 run will be only 5.3 million reds and recommends prohibition of fishing in Bristol Bay in 1974. The Japanese high-seas fishery customarily takes 20% of the total Bristol Bay runs, however, it is felt that the high-seas fishery is not the sole cause of recent poor runs. Unusually harsh winters have caused high mortalities to eggs and fry and are thought to have been a factor also.

Dungeness crab fishermen in the Cook Inlet area reached agreement with operators of seismic exploration vessels regarding avoidance of properly marked fishing gear by vessels towing seismic gear. Further out in the Gulf of Alaska, domestic fishermen were still experiencing gear damage and loss due to trawling by Japanese and Soviet vessels despite international agreements to avoid longline and pot gear of other fishermen.

**British Columbia:** A 10-day fishermen's strike resulted in an unusually large escapement of sockeye salmon to Pinkut River, a tributary to Babine Lake of the Skeena River system. The Fisheries Service of the Canadian Department of Environment by means of two helicopters transplanted a great many of these sockeye to a 4-mile area above two impassable falls in the river. If the transplant is successful, it could mean a major new sockeye run. This same strike led to an unusual harvest of about 100,000 sockeye at the counting fence at the entrance to Babine Lake in order to reduce the escapement by 25%. The harvested fish were canned. British Columbia sockeye in 1973 were of large size; some weighed 14 pounds compared to the usual 6-pound average.

The Fisheries Service of the Department of Environment, Cahada, in early 1973 announced plans to call for tenders for construction of a \$4 million salmon hatchery on the Quinsam tributary of the famous Campbell River with construction to start in April. The hatchery will raise 3 million 90-day-old chinook salmon, 1.85 million yearling coho salmon, 20,000 steelhead trout smolts, plus small numbers of other salmonids. The Fisheries Research Board of Canada after a 6-year effort to transplant the American lobster (*Homerus americanus*) from the Atlantic to the Pacific coast abandoned its project at Fatty Bay, Vancouver Island, apparently for economic reasons. A major stock of shrimp has been located off Tofino on the west coast of Vancouver Island. Canadian fishery agency officials say the stock will be exploited in 1974 and initial estimates of annual harvests are "millions of pounds" in comparison to the 794,000 pounds harvested off British Columbia in 1972.

**Washington:** The commercial landings of salmon in the State of Washington exceeded 8 million fish in 1973 and have been surpassed only 4 times in the past 20 years. The 1971 landings totalled 8.3 million salmon. The 1973 chum salmon catch was 602,000 compared to 895,000 fish in 1972 when chums were unusually abundant. Sockeye was the abundant

species in 1973 accounting for nearly 2.7 million salmon in the State's total. Escapements of chinook and coho to Washington hatcheries were good.

The first commercial fishing season in Washington for steelhead, except in the Columbia River, in more than 40 years was permitted Indian fishermen in certain rivers beginning December 1, 1973. The Washington Department of Game set the season as the result of a U.S. Supreme Court ruling that Puyallup Indians should be allowed to fish steelhead commercially. However, the Game Department did not permit sale of steelhead within the State. Subsequently on February 12, 1974, U.S. District Court Judge George H. Boldt in Tacoma ruled in favor of 14 Indian tribes in a case brought by the U.S. Government against the State of Washington. The State is appealing Judge Boldt's decision but in the interim the fishing laws of the States of Washington and Oregon are in turmoil.

**Columbia River:** The 1973 fall chinook run to the Columbia River was the best in 25 years. Over 136,000 chinook were caught during the 32-day commercial season below Bonneville Dam and 52,000 were caught in the 56-day Indian fishery above the Dam. The coho run was down; only 121,000 coho were caught below Bonneville where the 10-year average is 200,000. The Indian catch above Bonneville was 8,000 coho which is about average.

Research on the effects of nitrogen supersaturated water on fish in the Columbia River is continuing at the Environmental Protection Agency's Western Fish Toxicology Station at Corvallis, Oregon. In addition the National Marine Fisheries Service in cooperation with the state fishery agencies of Idaho, Oregon and Washington continued a third year of field work funded by the Army Corps of Engineers to devise ways of minimizing injury to downstream migrant salmon and steelhead at dams.

Because of low-water flows in the Columbia River and the energy crisis, the state and federal fisheries agencies agreed, beginning November 8, to a temporary reduction of auxiliary attraction water and water through fishways at Columbia River dams so the water saved could be used to generate electricity. By late December stream flows in the Pacific Northwest had improved and the fishway water flows were restored to normal winter operational levels.

**Idaho:** Salmon and steelhead returning in 1973 to Idaho tributaries of the Columbia-Snake River system arrived on the spawning grounds in better than usual physical condition in recent years. The low-water discharge during the year resulted in good fish passage conditions at main-stem dams because of reduced flows over spillways. The salmon count over Ice Harbor Dam, Washington, the dam furthest downstream on the Snake River, was the highest recorded since counting began there in 1962. Over 17,000 spring chinook salmon returned to Idaho's Rapid River hatchery, tributary to the lower Salmon River.

In March, 64 experts from 6 federal agencies and 3 States scoured 107 miles of the Snake River from Hells Canyon Dam downstream to Lewiston, Idaho during the Hells Canyon Control Flow Study. This study encompassed the observed effects of 5 different controlled flows, each of 1-day duration, on 6

functional uses of the flows. By late 1973 and early 1974 a 16-chapter draft report on the study was being reviewed by the participating agencies. The results of the study should be helpful in making decisions regarding water requirements for instream uses in the area.

**Oregon:** The fall chinook run past the Oregon City Falls on the Willamette River, which is a major tributary of the Columbia River entirely within the State of Oregon was good in 1973. By early October over 22,000 fall chinook had been counted through the new fishway over the falls. Prior to 1965 these falls had been an almost complete block to fall chinook and only 85 fish were counted over the falls in the autumn of 1965.

Shrimp fishing off Oregon continued good in 1973 with a record 24.1 million pounds being landed by the close of the season, October 15. The shrimp fleet was also of record size and Coos Bay was Oregon's leading port in shrimp landings.

Oregon Aqua-Foods, Inc., in November released 30,000 large (1.0-2.0 fish per pound) chinook fingerlings from its private hatchery on Wright Creek, a tributary of the Yaquina River. Only 10,000 of the fingerlings were released in Wright Creek while the remaining 20,000 were released in Fleagles Creek also a Yaquina River tributary. The fingerlings were Trask River stock supplied by the Fish Commission of Oregon at a small size (1.0 fish per pound) with the provision that Oregon Aqua-Foods after rearing the fingerlings would release 3 pounds of fish of a 1.0- to 1.2-fish per pound size for every pound of small fingerlings furnished. Although the released chinook will be subject to commercial and sport fisheries before they return as adults to spawn, a good return is expected because of the large size of the juvenile fish when released. Success of the experiment will be measured by the number of adult chinook that return to the trap maintained by Oregon Aqua-Foods at its Wright Creek hatchery.

The Oregon State Legislature in 1973 changed the name of the Oregon Game Commission to the Oregon Wildlife Commission effective January 1, 1974. The Wildlife Commission is one of PMFC's member agencies.

**California:** Anchovy landings during California's 1973-74 season totalled 89,358 tons through December, 1973, and were continuing, compared to 75,039 tons for the entire 1972-73 season which expired May 15, 1973.

The California Legislature in 1973 established an experimental size limit and commercial trolling season for coho salmon by changing California's previous 25-inch total-length minimum-size to 22 inches and the previous April 15 opening to May 15 in 1973 and 1974, and to June 1 in 1975 and 1976. There were no changes in the April 15 opening and the 26-inch size for troll caught chinook (king) salmon. In 1973 the change for coho resulted in increased troll landings in California, but the landings of chinook were also above average. For more information about California's troll fishery, see the discussion by the Salmon-Steelhead Committee on page 13 and also Status of the 1973 Pacific Coast Troll Salmon Fishery on page 36 of this report.

Chinook (king) salmon escapements to Central Valley streams (Sacramento - San Joaquin area) in 1973 were an estimated 274,000 fish, the best since the 1969 estimate of 341,000 and the second best in 10 years. The 1973 escapements were 69% greater than those of 1972.

The Department of Fish and Game has proposed a study of the golden shiner, a 3- to 5-inch Midwest minnow, as a sort of "Miner's Canary" to indicate the quality of California's fresh waters. This lowly fish, considered by many fishermen as a useless pest and competitor for food of sport fish, is now being used by several Midwest States as an indicator of water quality. Such use does not eliminate the need for the usual chemical analyses, but it does give a quick and direct indication of safety for aquatic organisms.

## ADMINISTRATION

### Personnel

The following served as Commissioners during 1973:

#### Alaska

Edward G. Barber, Anchorage (successor to Frank Peratrovich effective September 28) James W. Brooks, Juneau, First Vice-Chairman T. E. Thompson, Petersburg

#### California

G. Ray Arnett, Sacramento, Second Vice-Chairman Harold F. Cary, San Diego Vincent Thomas, San Pedro

#### Idaho

H. Jack Alvord, Pocatello.  
Joseph C. Greenley, Boise, Chairman  
Paul C. Keeton, Lewiston

#### Oregon

Allan L. Kelly, Portland (successor to Jack F. Shields effective October 1)  
Thomas E. Kruse, Portland, Secretary  
John W. McKean, Portland

#### Washington

Harold E. Lokken, Seattle  
Ted G. Peterson, Seattle  
Thor C. Tollefson, Olympia, Third Vice-Chairman

The Advisory Committee functioned under the "ADVISORY COMMITTEE RULES AND PROCEDURE" of November 1971. Its members in keeping with Article X of PMFC's Rules and Regulations were reappointed for 2-year terms beginning January 1, 1973 or were appointed subsequently for the unexpired remainders of 2-year terms as vacancies occurred. The membership during 1973 was as follows:

#### Alaska

Jack B. Cotant, Ketchikan  
Richard I. Eliason, Sitka, Section Chairman  
Ben Engdal, Wrangell  
Lewis Hasbrouck, Cordova

Andy Mathieson, Petersburg (successor to Harold 2. Hansen)

Charles A. Powell, Kodiak Bill Ray, Juneau (successor to Norman A. Riddell)

#### California

Earl Carpenter, Bodega Bay  
Peter T. Fletcher, Rancho Santa Fe  
John P. Gilchrist, San Francisco  
Robert Hetzler, Terminal Island, Section Chairman  
Paul McKeegan, Santa Clara  
John P. Mulligan, Terminal Island (successor to Charles R. Carry)  
Oliver A. Schulz, San Francisco (successor to Clifton D. Day)

#### Idaho\*

John Eaton, Cascade  
Jack Hemingway, Sun Valley, Overall Chairman  
Robert G. Thomas, Coeur d'Alene (successor to Robert Kalb) Deputy Chairman

#### Oregon

David B. Charlton, Portland, Section Chairman  
Charles S. Collins, Roseburg  
J. F. Hoagland, Astoria  
Ross F. Lindstrom, Astoria (successor to H. C. Buckingham) Arthur Paquet, Astoria Thomas A. Peterson, Charleston Phillip W. Schneider, Portland

#### Washington

Earl E. Engman, Tacoma, Section Chairman  
Warren H. Johnson, Arlington  
Michael E. Luft, Port Angeles  
Bjarne Nilsen, Westport  
Jesse M. Orme, Seattle  
» John N. Plancich, Anacortes  
William G. Saletic, Seattle (successor to Nick Mladinich)

The permanent staff comprised:  
John P. Harville, Executive Director  
Gerald L. Fisher, Treasurer Anne Reynolds, Office Secretary

They were assisted for short periods by:  
Alphonse Kemmerick, Consultant  
Leon A. Verhoeven, Consultant

Temporary clerical employees were utilized as needed.

"The Advisors from the host State elect an overall Chairman and Deputy for the Advisory Committee.

## Conferences and Meetings

The Executive Director represented the Pacific Marine Fisheries Commission at the following meetings and conferences in 1973:

### International Affairs

FAO Technical Conference on Fisheries Management and Development, Vancouver, Canada, February 13-23;

Meeting of U.S. fishery representatives from the Pacific Coast with Ambassador Donald L. McKernan, Seattle, April 3, in preparation for joint discussions with Canadian counterparts of Canada-United States salmon problems of mutual concern;

Joint Canada-United States discussions on salmon problems of mutual concern, Seattle, May 1-8, and Vancouver, September 25-29,

Meeting of U.S. fishery representatives to review status of salmon problems of mutual concern to Canada and United States, Seattle, October 24-25;

### National Affairs

Joint meeting of representatives of the three interstate marine fisheries commissions with personnel of NOAA and NMFS relative to State-Federal Fisheries Management Program (J. E. Lasater, Assistant Director, Washington Department of Fisheries, as the representative of PMFC's Executive Committee, accompanied the Executive Director) Washington, D.C., March 12-16;

Shellfish Institute of North America, annual meeting, New Orleans, Louisiana, June 24-28;

NOAA Conference on the Oceans and Economic Development, Seattle, July 17-19;

International Association of Game, Fish, and Conservation Commissioners, annual meeting concurrent with annual meeting of American Fisheries Society, Orlando, Florida, September 8-14;

National Workshop on Marine Sanctuaries, Washington, DC, November 28-30;

*ad hoc* Planning Committee meeting in Washington, DC, November 28-30, to prepare agenda for meeting of fishery directors from coastal States with NOAA and NMFS leaders to be held in Washington, DC, January 28-29, 1974.

### Regional, Relative to State-Federal Fisheries Management Program (SFFMP)

Review of NMFS Northwest Region grant and aid programs, Seattle, February 2, and Columbia Fisheries Program, Portland, April 23;

Meetings on Dungeness Crab Project of SFFMP: Policy and Scientific Committees, Portland, February 26-27; California Advisors, Eureka, October 15; Oregon Advisors, Newport, October 17; and Washington Advisors, Aberdeen, October 29;

### Other Regional and Local Meetings

Oregon Town Hall (fishery) Meetings participated in by federal and state agencies and fishermen, processors and other interested persons at Brookings, January 15; Coos Bay, January 16; Newport, January 17; and Tillamook and Astoria, January 18;

NOAA Sea Grant Advisory Services Workshop, Portland, Oregon, January 22-23;

NMFS *ad hoc* Committee on Surveillance (of foreign fishing) Seattle, January 30 and November 20;

Albacore Coordinating Committee, San Diego, California, March 5-6;

Pacific Fishery Biologists' Annual Meeting, Harrison Hot Springs, British Columbia, March 21-23;

American Institute of Fishery Research Biologists, Oregon — S.W. Washington chapter, meeting with members of the Oregon State Legislature, Salem, May 21;

Tuna Conference and Eastern Pacific Oceanic Conference, Lake Arrowhead, California, October 1-5;

Joint meeting of California, Oregon and Washington groups affiliated with National Wildlife Federation, Eureka, California, October 20-21;

Fish Commission of Oregon hearing regarding possible extension of troll fishery season for salmon, Portland, October 31.

## Administrative and Service Activities

**Executive Committee Actions:** The Committee at its first meeting in Portland on June 19 and 20 took the following actions:

1. Approved appointments of new advisors: Andy Mathiesen, and Bill Ray from Alaska; Oliver A. Schulz from California; and Robert G. Thomas from Idaho;
2. Approved FY 1973-74 budget, with instructions to restudy effect of possible need for additional economies due to unexpected funding problems in several States, and suggested possible economies:
  - a. Refrain from appointing alternates to attend Annual Meeting at PMFC's expense, and seek other means of reducing costs of meeting attendance;
  - b. Use charter or group-rate air transportation to Annual Meetings;
3. Approved general progress of PMFC support functions and special projects, including: actions in support of federal legislation; Dungeness Crab Project of the State-Federal Fisheries Management Program; and Coastwide Albacore Project of the Sea Grant Program;
4. Endorsed management objectives developed by Salmon-Steelhead Committee and instructed that Committee to develop rational management plans and programs consistent with the objectives; (This assignment should include for

review and consideration by the Executive Committee:

- a. Analysis and organization of pertinent data in concise form, and
  - b. Preparation of a proposal for future management, which would include discussion of advantages and disadvantages of alternative approaches and procedures.)
5. Agreed to seek opinions on salmon management objectives from fishing industry by circulation of revised draft of the objectives to PMFC's Advisors; and to consider formation of a subcommittee of Advisors, based on opinions received, to collaborate with Salmon-Steelhead Committee;
  6. Instructed Executive Director to coordinate a comparative review of tax and license structures for support of fisheries within the several States, and to analyze problems and possible solutions to reduce differences between States;
  7. Established a policy for expression of PMFC positions at intra-state levels with the following guidelines:
    - a. Executive Director should present PMFC's positions at intra-state levels in a manner similar to presentations at national levels, except that PMFC should not enter an intra-state argument if PMFC's position conflicts with that of the responsible state agency.
    - b. Normal procedures for review, by the Executive Committee, of written presentations either by correspondence or telephone conferences should be followed, except that Executive Director must exercise judgment in emergency situations.
  8. Instructed the Executive Director to draft a letter supporting the central objectives of the High Seas Fisheries Conservation Act but opposing the inclusion of Environmental Protection Agency and Food and Drug-Administration sanitation controls in that legislation;
  9. Voted in executive session to increase salary of Executive Director by 10% over the amount originally budgeted for FY 1973-74, but without increase of the total budget.

\* The Executive Committee at its second meeting, in Boise on November 13, took the following actions:

1. Approved, as emergencies, four proposals for consideration as resolutions:

No. 12, "Objectives for Management of Chinook and Coho Salmon Resources " (see Resolution No. 12 on page 24);

No. 13, "Concerning Necessity for Maintaining Position of Special Assistant for Fisheries and Wildlife to the Secretary of State" (see Resolution No. 13 on page 25);

No. 14, "Support for the State of Idaho Position on Reclassification and Enlargement of Idaho Primitive Area and Salmon River Breaks Primitive Area" (see Resolution No. 14 on page 25);

No. 15, "Request for Maintenance of Fuel Supply to the United States Fishing Industry" (see Resolution No. 15 on page 25);
2. Approved appointments of new advisors: Ross F. Lind-

Strom from Oregon; John P. Mulligan from California; and William G. Saletic from Washington;

3. Reviewed the Treasurer's report of receipts and disbursements for the period November 1, 1972 to October 31, 1973 and recommended for approval by the Commission a revised budget for the biennium July 1, 1973 to June 30, 1975;
4. Approved increasing the private car mileage allowance from 9 cents to 10 cents per mile effective December 1, 1973, but postponed consideration of increasing the per diem allowance for meals and lodging until the Committee's next meeting in the spring of 1974;
5. Reviewed the Executive Director's report; and
6. Nominated members to the Executive Committee for 1974 and accepted Alaska's offer to host the PMFC's 1974 Annual Meeting at Anchorage in early October.

**PMFC's Standing Committees:** The Research Director and /or PMFC Coordinator from each PMFC member state agency assigns scientists from his staff to serve on one of the four standing committees: albacore, groundfish, salmon-steelhead, and shellfish. The purpose of these committees and the Research Directors and Coordinators Group is to assist PMFC in the wise management, development and utilization of fisheries of concern to two or more States. PMFC's Executive Director assists the committees and Group and provides liaison between the scientists and the Commission.

*Research Directors and Coordinators Group:* This Group, in addition to frequent intra-group correspondence, met twice in 1973 under the Chairmanship of James C. Simpson (Idaho Fish and Game Department): in Portland on September 19-20; and in Boise on November 13. At these meetings the Group reviewed the actions and recommendations of the standing committees and appointed scientists to serve on the Working Teams of the Advisory Committee at the annual PMFC meeting.

*Albacore Committee:* This Committee under the Chairmanship of Charles W. Hooker (California Department of Fish and Game) met three times prior to the annual PMFC meeting and a fourth time at that meeting. The Committee during 1973 provided technical support for the coastwide albacore research project which is funded by the Sea Grant Program. Primary actions were planning, distribution, and management of the recently introduced uniform West Coast albacore logbook in cooperation with the National Marine Fisheries Service. In addition, with aid of Sea Grant funding, port sampling was extended to the Washington fishery and was intensified in Oregon and California. PMFC's Committee also participated in meetings of the Albacore Coordinating Committee which represents governmental and private interests for the entire West Coast in a cooperative albacore fishery management and research program.

In support of the cooperative program, PMFC implemented recommendations of the Albacore Coordinating Committee by submission of a proposal for extension of Sea Grant support. NOAA extended the Sea Grant support to July 31, 1974 with funding in the amount of \$64,500. A major new element of

the project was establishment of a Sea Grant Data Task Group to develop procedures for a coastwide data system for vessels, fishermen and landings. Clemens B. Britzer, Economist, NMFS Southwest Region, is Chairman of this Task Group which includes Doyle E. Gates and Frederick Walgenbach from the California Department of Fish and Game, Elmer C. Case from the Fish Commission of Oregon, and Henry O. Wendler from the Washington Department of Fisheries. Robert J. Williams was hired by PMFC with Sea Grant funds as an investigator for this special project.

PMFC at its annual meeting in Boise received three reports on albacore. PMFC Albacore Committee Chairman Charles W. Hooker verbally reviewed the "Status of the 1973 Pacific Coast Albacore Fishery" (see Appendix 1 for the updated status report). Ronald Lynn, NMFS Southwest Fishery Center, reported on the activities of NMFS and the American Fisherman's Research Foundation (AFRF) in the cooperative albacore fishery management and research program. Frederick Walgenbach, in the absence of Task Group Chairman Britzer, reported on the status of the project to establish a "Coastwide Vessel, Fisherman and Landings Data System." He acknowledged the active support for this special project by the Albacore Coordinating Committee and particularly by AFRF which contributed funds in addition to those contributed by NOAA's Sea Grant Program. He stressed the utility of the data base system to other fisheries and the Task Groups' determination to maintain the confidentiality of the personal financial affairs of fishermen. He also commended PMFC for its coordination and administration of the project.

*Groundfish Committee:* This committee under the Chairmanship of James M. Meehan (Fish Commission of Oregon) continued to monitor the groundfisheries, "except the halibut fishery, and to serve on the U.S. section of the Technical Subcommittee of the International Groundfish Committee (a Canada-United States entity). A major objective of PMFC's Groundfish Committee is coastwide standardization of catch per unit of effort data. This information is needed particularly for improvement of international data exchanges. The Committee recommended continuation of PMFC's contribution of matching funds for support of the cooperative age-determination unit in Seattle and approved moving the PMFC-Washington Department of Fisheries technician to the Department's laboratory on the University of Washington campus.

The Committee reported to PMFC at its annual meeting on three subjects. Gene DiDonato (Washington Department of Fisheries) described the International Groundfish Committee and its Technical Subcommittee and discussed the following actions by that Subcommittee during 1973.

1. Completion of a status report on Pacific ocean perch which recommends harvest quotas for the Columbia and Vancouver statistical areas of the International North Pacific Fisheries Commission: Because foreign distant-water fleets have been a substantial factor in the depletion of the perch resource, this report and its recommendations were taken to bilateral meetings between the United States and Japan, and between the

United States and the Union of Soviet Socialist Republics. Although acceptance of the specific recommended quotas was not achieved at those negotiations, restrictions were agreed to which hopefully may allow the perch stocks to recuperate over a period of years.

2. Determination of the major species composition of the "Other Rockfish" category in the Soviet catch data: We now know that the "Other Rockfish" category contains species that are important to U.S. trawl fishermen, and we can now call attention to those species at future negotiations.
3. Conclusion that fluctuations in Pacific cod abundance, that in the past were due to environmental factors, may now be due to the combined Canadian and American fishing effort off the lower west coast of Vancouver Island which may be overharvesting the spawning stocks: To date no changes in fishing regulations are recommended, but the Technical Subcommittee is monitoring the fishery closely.
4. Realization that fluctuations in the landings of groundfish, that in past years were reflections of market demand, now may be reflections of the effects of increasing fishing effort: Pacific ocean perch definitely have been overfished; Pacific cod may be approaching an overfished situation; and we know that foreign trawlers are catching significant amounts of Dover sole and "Other Rockfish" that are important to our fishermen. The Technical Subcommittee has chosen as a goal in 1974 the definition of research priorities in relation to the various fishery problems, and PMFC's Groundfish Committee intends to determine how the research efforts of its member agencies can be coordinated with Canadian research and the priorities defined by the Technical Subcommittee.

Following the report on the actions of the International Groundfish Committee and its Technical Subcommittee, Gene DiDonato reviewed verbally the "Status of the 1973 Pacific Coast Groundfishery." See Appendix 1 for the updated status report.

Tom Jow (California Department of Fish and Game) reported verbally with the aid of photographic slides on his observations as a visiting U.S. fishery scientist aboard the Soviet research vessel *SESKAR* from September 2 to 17 while it cruised from Vancouver Island to Central California. During his observations the vessel was employed in acoustical work during the day and in trawling during the night. He felt that exchanges of personnel between the Soviet and American fisheries were beneficial and that he had gained valuable experience from the cruise and his interactions with the *SESKAR's* scientists and crew.

*Salmon-Steelhead Committee:* This Committee under the Chairmanship of David W. Ortmann (Idaho Fish and Game Department) was extremely busy during 1973 as salmon management matters continued to constitute PMFC's most difficult problems and to impose the greatest stress on its scientific staff. The Committee met in Portland on April 5 and 6 to evaluate

pending legislation to change California's law regarding the catching of coho salmon in its commercial troll fishery from an April 1 5 opening date and a 25-inch minimum-size limit to a May 1 5 opening and a 22-inch minimum size. The Committee reported its unanimous opposition to these changes to PMFC's Executive Director and that position was forwarded via the California Department of Fish and Game to the Governor and Legislature of California. Nevertheless, legislation was enacted by California which established for its coho troll fishery a 22-inch minimum size and a May 15 opening in 1973 and 1974 and a June 1 opening in 1975 and 1976.

Subsequently, the Committee agreed to undertake the fullest possible evaluation of the effects of those changes. PMFC allocated \$3,000 in emergency funds for field studies in 1973 and additional emergency funds were allocated by California and by federal agencies.

At the annual PMFC meeting, Chairman Ortmann reported that the Committee had met a second time on November 13 and was still opposed to the changes in the California coho fishery and that Oregon and Washington advocated a June 1 5 opening without a minimum-size limitation. The Committee recommended continuation of efforts by PMFC to obtain additional funds for increased monitoring of the California and Oregon troll fisheries for coho. He then verbally reviewed the "Status of the 1973 Pacific Coast Troll Salmon Fishery" and the "Status of the 1972 Salmon and Steelhead Sport Catches in the Pacific Coast States" (see Appendix 1 for these updated reports) before calling on Pat O'Brien (California Department of Fish and Game) to report on the first year's observations in the California troll fishery with the changed season opening and minimum size for coho. The following is a paraphrased transcription of his tape recorded report.

In California prior to 1 963 the commercial troll catch of silver or coho salmon was small, but in 1 963 the coho catch exceeded one million pounds for the first time and coho since then have continued to be important to California trailers. In 1966 and 1967, coho landings in California peaked with numbers of coho caught actually exceeding the numbers of chinook caught. This year the California fishery landed approximately 2.3 million pounds of coho. Concurrent with the increased landings of coho there was a growing shaker problem (the catching and releasing of coho that were less than the 25-inch minimum legal size prior to 1 973). Reports on this problem were presented at the 1 970 annual meeting and were printed in the *23rd Annual Report of the Pacific Marine Fisheries Commission for the Year 1970*. The estimates of the numbers of coho that had to be released were large and the estimates of losses to the Pacific Coast fisheries because of injuries and deaths of released fish were alarming.

In 1 969, the shaker problem was so prevalent off California that trailers were catching an estimated 200 shakers a day. The California Department of Fish and Game initiated a study to determine what could be done to alleviate the problem. In 1971 and 1972, 251-man days were expended in the examination and collection of data on the coho fishery, and simultaneously

in conjunction with a Sea Grant project about 4,000 coho were tagged to determine their seasonal migration pattern.

This work gave good estimates of the shaker catches plus evidence that the California season opening on April 1 5 with a 25-inch minimum-size limit for coho was undesirable. On April 15, coho off California are all less than 25 inches in length. The shaker problem does not become prevalent until the latter part of May and the first part of June when the coho have increased in length. By that time, particularly if trolling for chinook is poor, some fishermen from the Fort Bragg — Eureka — Crescent City area where coho are important begin to concentrate on catching coho. During the latter part of May as much as 90%, and in the first part of June as much as 70% to 80% of the coho hooked may still be less than 25 inches long. The study also indicated that under-size coho (shakers) suffer a higher injury or mortality rate than do chinook of a similar size when released.

Recaptures of tagged coho indicated that coho moved rapidly through the offshore fishery. Less than 1 0% of the recaptures occurred off California and most of the remaining recaptures were from off Oregon and Washington and from the Columbia River. Columbia River hatcheries returned 42 tags.

Based on the data collected and on the growth rate of coho, it appears that an opening sometime in June without a minimum-size limit would be a good solution to the California shaker problem. All the coho in the California fishery are in their third or final year of life. The length data indicate that by June 1, 80% to 90% of the coho are over 22 inches long.

The regulation enacted in 1973 provides for a 4-year trial of a 22-inch minimum size and seasons for coho opening on May 1 5 in 1 973 and 1 974 and on June 1 in 1 975 and 1 976. It also provides that anytime the Director of the Department of Fish and Game feels that the fishery is being endangered, he may recommend return to the old April 1 5 opening and 25-inch minimum size.

The first year's experience with the new regulation was good. In spite of my previous estimate that many of the coho on May 1 5 would be less than 22 inches long, it happened this year that the coho were approximately 2 weeks ahead in growth compared to that observed in the 3 previous years. This same early season growth was observed also in Oregon and Washington in 1973. As a consequence less than 10% of the coho caught off California were less than 22 inches long. The catch of coho between 22 and 25 inches long was about 100,000 fish and the number shorter than 22 inches was less than 16,000. In previous years the estimated number of shakers exceeded 200,000. The new regulation helped reduce the shaker problem and we feel that by the end of the 4-year trial we will have sufficient data to propose the best solution for California's coho shaker problem.

Chairman Ortmann thanked Pat O'Brien for his report and presented the following statement:

"The Pacific Marine Fisheries Commission's Salmon-Steelhead Committee has examined preliminary data col-

lected during the first year of California's 4-year experimental coho fishery; and, considering political, economical, and biological ramifications, feels that the only plausible course of action is to continue with the remaining 3 years of the proposed experiment. We would object to any proposal for a May 15 opening on a continuing basis if this proposal were made before completion and evaluation of the California experiment. '

Chairman Ortmann next reported on the Salmon-Steelhead Committee's management objectives. The Committee in response to instructions from PMFC reviewed and revised its proposed "Objectives for Management of Chinook and Coho Salmon Resources" (see Resolution No. 12 on page 24). This revision was submitted to the Executive Committee at its June 19-20 meeting, for industry review and comment, and to the Research Directors and Coordinators Group. In July it was forwarded to PMFC's Advisors and Commissioners. The Executive Committee subsequently agreed to consider the objectives as an emergency proposal for adoption as a resolution at this meeting. Unfortunately the proposed resolution has created some conflict among salmon user groups, but it is not the intent of the proposed objectives to allow one fishery to prosper at the direct expense of another. Rather it is the intention to provide the framework for rational management of a resource which is subject to use by a variety of competing fisheries. To this end the Salmon-Steelhead Committee continues to endorse the objectives.

The Commission approved the Committee's reports and endorsed its statement on the continuation of California's 4-year experimental fishery for coho.

*Shellfish Committee:* This Committee under the Chairmanship of Herb C. Tegelberg (Washington Department of Fisheries) in addition to monitoring and advising PMFC on West Coast shellfisheries, provided scientific guidance for a Dungeness crab project under the State-Federal Management Program (SFFMP). SFFMP's origin, purpose and status were described at PMFC's annual meeting by Dr. T.E. Kruse, Vice-Chairman of the Policy Committee and Director of the Fish Commission of Oregon as follows.

1. SFFMP was initiated by the Federal Government after consultation with several States which agreed on the need for a coordinated program for U.S. fisheries in order to eliminate the great diversity, especially on the East Coast, between the fishery regulations of the various States. This diversity exists even though the citizens of the various States frequently fish in common on stocks of fish whose movements are not restricted to the jurisdiction of individual States.
2. NMFS allocated funds to provide impetus to SFFMP; and considered the interstate marine fisheries commissions as possible agents to administer funds for the development of this coordinated management program.
3. Fishery agencies of the Pacific Coast chose the Dungeness crab resource as the first project in the coordinated manage-

ment program, because the resource and its fishery are rather unique, the issues are fairly clear and a great wealth of biological data is on hand. California, Oregon and Washington are actively involved in the project, while Alaska participates as an observer and may wish to adopt management procedures that evolve. PMFC's Executive Director in concert with shellfish scientists developed a project proposal which was approved by NMFS.

4. The four following groups were established to guide and operate the project:
  - a. Policy Committee composed of the directors of California, Oregon and Washington state fishery agencies and NMFS Southwest and Northwest Regions plus observers from the Alaska Department of Fish and Game and NMFS Alaska Region; The Committee's Executive Secretary is PMFC's Executive Director.
  - b. Scientific Committee including the state scientists from PMFC's Shellfish Committee plus economists and federal scientists from NMFS Southwest and Northwest Regions;
  - c. Study Team composed of two economists, one each located in California and Washington, and a biologist located in Oregon; The Study Team was selected by the Scientific Committee and is federally funded by a contract between NMFS and PMFC. The Team is responsible for collection and evaluation of data and the making of recommendations to the Policy Committee. James D. Messersmith (California Department of Fish and Game) was named Project Manager by the Policy Committee to direct the activities of the Study Team. He reports on project matters to the Scientific Committee.
  - d. Advisory Committee composed of representatives of crab fishermen, processors and recreational interests in each State; These advisors are an integral part of the project and act as evaluators for concepts developed by the project and as liaison for communication of the fishery's needs and ideas to the project groups.

The progress of the project and future plans were discussed by the four groups and interested persons at a dinner meeting held November 14 in conjunction with PMFC's annual meeting in Boise.

At the November 15 plenary session of the annual PMFC meeting Jerry A. McCrary, Alaska Department of Fish and Game, and C. Dale Snow, Fish Commission of Oregon, respectively presented verbally, "Status of the 1973 Pacific Coast Shrimp Fishery" and "Status of the 1972-73 Pacific Coast Dungeness Crab Fishery." See Appendix 1 for both of these updated reports. Both of these scientists are members of PMFC's Shellfish Committee.

**Special Committee Responsibilities and Service Activities:** Because of the interactions between local, national and international fishery interests when dealing with West Coast fishery matters, PMFC's Executive Director and members of PMFC's Standing Committees are frequently required to serve on additional committees and task groups.



The International Groundfish Committee of the Conference on Coordination of Fishery Regulations between Canada and the United States held its 15th annual meeting at Boise, Idaho on November 13, 1973, the day before the annual PMFC meeting at the same location. Mr. R.G. McIndoe, Department of the Environment, Canada Fisheries Service was the Canadian member and 1973 chairman. Dr. John P. Harville, Pacific Marine Fisheries Commission, was the United States member. The Committee's Technical Subcommittee held its 14th annual meeting in Seattle from June 20 through 22, 1973. Mr. R.D. Humphreys, Department of the Environment, Canada Fisheries Service was subcommittee chairman. Recommendations and actions stemming from the Committee's and its Technical Subcommittee's deliberations have already been mentioned in a preceding section on PMFC's Groundfish Committee.

PMFC's Executive Director serves as an advisor on the United States delegation in a continuing series of discussions and negotiations with Canada on salmon problems of mutual concern. These discussions seek resolution of problems associated with interception by fishermen of one nation of salmon produced in the rivers of another nation. These problems of interception are difficult to evaluate and are even more difficult to control, since the oceanic migrations of many races of salmon take them from their country of origin through waters of another or neighboring country and result in the intermixing in marine waters of the salmon stocks of the two countries. Discussions held in Seattle on May 1-8 between Canada and the United States lead to an impasse which appeared to jeopardize continuation of existing bilateral agreements and reciprocal fishing privilege between the two countries. However, subsequent high-level discussions led to temporary extension of the bilateral agreements. Discussions held on September 25-29 in Vancouver were partially productive. Discussions on implementation of matters of agreement and on resolution of matters of disagreement are continuing but considerable differences still exist. Small working teams are continuing to meet to deal with technical and administrative aspects of the problems that must be solved to effectively protect<sup>1</sup> and manage the shared salmon fisheries. A formal meeting of delegates for the two countries was postponed from late December 1973 to early 1974.

Under other services PMFC's Executive Director testified, in Washington, DC, on September 17 before the House of Representatives Subcommittee on Fish and Wildlife Conservation and the Environment, in support of Anadromous Fish Conservation legislation. PMFC's Secretariat via authorization from its Executive Committee has also supported the proposed High Seas Fisheries Conservation Act of 1973 (H.R. 4760 and S.1069) and has endorsed Congressional Concurrent Resolutions in support of U.S. fisheries (S. Con. Res. 11 and H. Con. Res. 173). Additionally the Secretariat reviewed other significant federal programs and projects for Executive Committee consideration. These included bills to extend fisheries jurisdiction, presidential proclamations and supportive legislation relating to the proposed new cabinet-level Department of Environment and Natural Resources, and recommendations of the National Advisory Committee on Oceans and Atmosphere with respect to develop-

ment of a national fisheries policy. Other services were rendered in support of PMFC's 1972 resolutions which are discussed later herein.

**Publications in 1973:** The 25th Annual Report for the Year 1972 was published in July. Newsletters Nos. 19 and 20 were issued in October and December, respectively. An 81-page 1973 (salmon and steelhead) Mark List, which stemmed from the annual meeting on January 31 to allocate and record marks, was distributed in March. Revised and supplementary pages providing 1972 catch statistics for the Dungeness Crab and Shrimp Section of PMFC's Data Series were distributed in March 1973, and similar pages providing revisions and 1972 catch statistics for the Groundfish Section were distributed in January 1974 to holders of copies of those Sections.

PMFC was advised in 1973 that a Salmonid Literature Compilation is now available in microfiche card form. The Compilation is a 42,480-page information system consisting of scientific articles on salmon, trout, and char that were published during the period 1960 through 1964. The contents of the articles are coded according to subject matter, species, and stage of life history, allowing the researcher to obtain quickly and easily all material available on any subject published during the period. Use of the Compilation can eliminate costly literature searches and enables the user to discover quickly those areas of research where duplication or omission have occurred. A 190-page guide (instruction and index) book for use with and for a more detailed explanation of the Compilation can be obtained by ordering from the U.S. Department of Commerce, National Technical Information Service, Springfield, Virginia 22151, COM-73-10350 — *A Guide to the Salmonid Literature Compilation, 1960-1964* (paper copy \$3.00 or microfiche 950) 190 p. To obtain the Compilation and the Guide, order COM-73-10351 — *Salmonid Literature Compilation, 1960-1964*, microfiche set \$125.00, 42,480 p.

The Compilation was prepared by the Fisheries Research Institute of the University of Washington under sponsorship of PMFC and the Pacific Salmon Inter-Agency Council and was funded by an Anadromous Fish Program agreement between the Council and the National Marine Fisheries Service.

The 1960-1964 Compilation represents phase 2 of an overall Salmon Compendium project. Phase 1 was the "Pacific Salmon Literature Compilation — 1900-59" for which sets of 645 microfiche cards plus a copy of an Instruction and Index book become available in 1968 at a purchase price of \$185.00 per set. The 645-card set made available in microfiche form over 40,000 pages of the original 108-volume Compilation of salmon literature for the period 1900 through 1959. Card sets of phase 1 may be ordered also from the National Technical Information Service by requesting *Pacific Salmon Literature Compilation — 1900-59*, PB 174102. That order number includes the instruction and index book. If only the book is desired, one should order PB 174101, \$3.00.

There are no definite plans for phase 3 of the Salmon Compendium which would cover compilation of literature on anadromous trout, char, and salmon for years after 1964.

## COMMISSION ACTIONS

### Action on 1972 Resolutions

PMFC by unanimous vote of its five Compact States adopted six resolutions at its November 1972 annual meeting. PMFC's office forwarded the appropriate resolutions, with cover letters requesting supportive action, to a total of more than 75 agencies and individuals. These included the President and concerned Cabinet members; key Congressional Subcommittees; national and regional offices of NMFS, Department of the Interior, Corps of Engineers, and other key federal agencies; more than a score of national and regional organizations concerned with marine affairs; and the Governors and Congressional delegations of the five Compact States. The texts of the six resolutions were published in full in the December 1 1972 Newsletter No. 18, and subsequently in PMFC's 25th Annual Report. In the following sections, actions relating to these resolutions are reviewed briefly, both in terms of specific responses to the resolutions, and with respect to relevant developments at national and regional levels. These actions fall into three natural groupings: Law of the Sea and related foreign fishing problems; Snake River — Hells Canyon protection; and federal funding of fisheries enhancement programs.

#### I. LAW OF THE SEA CONFERENCE AND FOREIGN FISHING PROBLEMS

**Resolution 1, Support for the United States Position at the Law of the Sea Conference for Management of Ocean Fisheries, and Other Fisheries Protection Measures:** This resolution made three essential points: endorsement of the official U.S. "species approach" position for the Law of the Sea Conference; recommendation for continued close coordination with the fishing industry with respect to that Conference; and recommendation that the United States government "take on an urgency basis whatever steps are necessary, pending conclusion of the Law of the Sea Conference, to protect U.S. coastal fishery resources now being seriously damaged due to uncontrolled overfishing- by foreign fleets, such steps should include, but not be limited to, full utilization of the 1958 Geneva Fisheries Convention, other conventions, bilateral agreements, and multilateral agreements." In its earlier 1971 resolution, PMFC also had endorsed the "species approach", and had called for fishing industry participation in Law of the Sea deliberations. As in 1971, this 1972 resolution was distributed to appropriate federal offices and agencies, to the Congressional delegations from the Compact States, and to the Governors of all coastal States.

Federal agencies generally expressed appreciation for PMFC's support of the official U.S. position. Additionally, 13 coastal States have acknowledged receipt of the resolution: Alabama, Alaska, California, Connecticut, Florida, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Washington, and Texas. Governors Curtis of Maine and Wallace of Alabama stressed support for a 200-mile contiguous fishery zone instead of the species approach, believing that only this unilateral action will provide adequate protection for coastal fisheries and the industries they support.

A cogent assessment of the complexities of this issue was provided by Clair P. Guess, Jr., Executive Director of South Carolina's Water Resources Commission, in response to Governor West's request for comment. Director Guess acknowledged the growing concerns of coastal fishermen for encroachments by foreign vessels upon traditional fishing grounds, and noted:

While everyone will agree that some control and management of fishery resources is necessary, it will be difficult to agree on the methods for achieving this goal. The doctrine of the free and open sea is well established and has been supported by the United States in declaring its right to take fish in the waters off the coast of other foreign countries. So, if the United States is to take "whatever steps are necessary" to protect the fishery resources beyond the three mile limit, then we should also be expected to recognize the right of other countries to do the same.

A number of bills presently before the Congress seek unilateral 200-mile extension of U.S. jurisdiction over fisheries. Brief notes on these appeared on pages 1 1-13 of PMFC Newsletter No. 19, October 1973.

**Resolution 2, Opposition to Certain Federal Documents Provisionally Delimiting the Territorial Sea, Contiguous Zone, and Certain Internal Waters of the United States:** This resolution reiterated PMFC's 1971 stand in opposition to provisional charts which transferred important portions of Alaskan internal waters to international status. Background information and 1972 actions were reported in PMFC Newsletters 16 (p. 18-19) and 17 (p. 13).

On January 13, 1973, Congressman John Dingell introduced H.R. 2283 "to require that the methods of straight baselines shall be employed for the purposes of determining the boundaries of . . . fishery zone(s)." Passage of this measure would accomplish the objectives sought in PMFC's Resolution 2. Cosponsors of this measure were Congressmen McCloskey and Anderson of California, Downing of Virginia, and Murphy of New York.

PMFC joined with Alaska's Governor William Egan and Congressman Don Young in seeking support for this measure. On August 1, 1973, Senator Ted Stevens introduced Senate Bill S. 2301, calling for the straight baseline method of determining fishing zone boundaries. Senator Stevens noted that this legislation is identical to a bill he submitted in 1972, and also is identical to H.R. 2283. In his introductory speech he cited support from PMFC and from Alaska's Governor Egan and explained the rationale and purpose of this legislation as follows:

Mr. President, the bill which I am introducing today would change the present method used for determining the inward boundary of the 3-mile territorial sea. In most instances, the low water line along the coast, the straight baseline method would be employed. Thus, except where the 24-mile closing rule applies, the inward boundary of the territorial sea would be computed by drawing a straight line between the two headlands of a bay or other indentation in the coastline. In the case of a bay which is more than 24 miles wide, the inward boundary would be determined

by drawing a line across the width of the bay at the point where it exceeds 24 miles. When there is a fringe of islands along the coast, the inward boundary would be computed by drawing a straight line between the islands. Any areas enclosed within the line would be designated as part of the inland waters of the United States. Since the inward boundary of the territorial sea would be drawn further from shore along certain stretches of the coastline of my State of Alaska, the use of the straight baseline method would significantly widen the marine areas under the jurisdiction of both Alaska and the United States in these coastal regions.

This bill will protect American fisheries from the deprivations of foreign fishermen. Such protection is necessary for two reasons. First, foreign fishing activity off the coasts of the United States has seriously threatened our marine resources. American fishermen are required to adhere to stringent laws and regulations respecting the time, place, and manner of fishing activities. However, foreign fishermen are subject to fewer restrictions. As a result, the salmon runs in my State have often been threatened by foreign nationals using harvesting techniques which are forbidden to our own fishermen.

Foreign fishing activity only a few miles off the coasts of the United States has also posed a severe economic threat to

American commercial fishermen. Partly as a result of this activity, the United States ranks well down among the world's fishing nations, a poor sixth, behind Japan, Peru, Communist China, the U.S.S.R., and Norway, in spite of our advanced technology in other areas and abundant natural resources. The economic consequences of foreign fishing are felt throughout the United States . . . PMFC has addressed letters in support of straight baseline legislation to the chairmen of responsible committees in the Senate and the House of Representatives, and will continue to offer support wherever possible.

## II. SNAKE RIVER - HELLS CANYON PROTECTION

**Resolution 4, Preservation of Middle Snake River as a Free-Flowing Stream for Optimal Protection of Irreplaceable Fishery and Recreational Resources:** This resolution called upon the Federal Government, in cooperation with the States of Idaho, Oregon, and Washington:

to establish a management policy and create the necessary operational machinery to permanently guarantee the free-flowing character of the Middle Snake River and tributaries from Hells Canyon Dam to Lower Granite Pool; that this policy include a permanent moratorium on further damming or major impoundments, assurances of an appropriate share of water resources to optimize productivity of migratory and resident fish populations, and control of shoreline developments and other water-quality-related factors requisite to maintenance of optimal physical conditions for the ecologic welfare of fish and wildlife and the maximal value of this region for human recreation . . .

The resolution further urged that:

state and federal fisheries be pledged to fullest possible cooperation in assessment and specification of in-stream requirements of major fish populations as basis for establishing optimal and minimal standards for Snake River water quality and quantity.

The general intent of this resolution was supported by all governmental agencies to which it was sent. Additional important support came from the Wildlife Society when its Council voted on March 17 to endorse the resolution. Senators Church and McClure of Idaho, and Packwood and Hatfield of Oregon, early in 1973 indicated that the drafting of legislation supportive of the resolution's objectives was in process.

Under the overall direction of Keith Bayha of the Fish and Wildlife Service's Bureau of Sport Fisheries and Wildlife, a closely coordinated study of impacts of varying flow levels upon the Middle Snake River was undertaken in late March 1973. Details of this study were given in PMFC's, Newsletter No. 19, October, and the status of a report on the results was mentioned earlier herein (see page 9). PMFC views this study as effective on-going implementation of the second element of Resolution 4.

On July 23, 1973, Senators Church and McClure of Idaho, and Packwood and Hatfield of Oregon joined in introducing Senate Bill 2233 to establish the 101-mile Snake River reach from Hells Canyon Dam to Asotin, Washington, together with portions of certain tributaries and adjacent lands, as the Hells Canyon National Recreation Area. Senator Church's supporting speech to the Senate indicated the landmark significance of this joint sponsorship:

This bill represents the culmination of months of work and numerous meetings between the four Senators from Idaho and Oregon. The work has, however, been well worth it. For the first time, we have reached a common agreement on a legislative approach to save the Hells Canyon and its surrounding environs.

Like all initial drafts, the bill can undoubtedly be improved. This task, however, must be left to the hearing process. We intend to hold hearings on the legislation in Idaho and Oregon, so that the people of our respective States can fully express their views.

He described 12 major features of the bill (see *Congressional Record*, July 23, 1973, p. S1 4295-1 4296) including:

- creation of a Hells Canyon Recreation Area surrounding Hells Canyon itself, and including *Vi* mile buffer zones on either side of the river upstream to Brownlee Dam and downriver to Asotin, Washington;
- creation of a Wilderness Area within the Recreation Area to incorporate major scenic features of Hells Canyon;
- total prohibition of further dam construction in the Recreation Area;
- protection of upstream water rights in Idaho; (Senator Church stressed the importance of this provision, a

long-standing insistence of Idaho, by quoting the language of the bill as follows:

No provision of this Act, or any guidelines, rules or regulations issued hereunder, shall in any way limit, restrict or conflict with present and future use of the waters of the Snake River and its tributaries upstream from the boundaries of the Hells Canyon National Recreation Area created hereby, for beneficial purposes, whether consumptive or non-consumptive, now or hereafter existing, including waters used for domestic, municipal, stockwater, irrigation, mining, power, or industrial purposes.)

- other provisions concerning grazing, condemnation powers, funding, and other management aspects of the Act.

Introductory speeches by Senators McClure, Hatfield, and Packwood further underscored the cooperative (and compromise) nature of this jointly sponsored legislation. Oregon's Bob Packwood called attention to his efforts toward such legislation in 1971, and offered the following comments concerning the importance of the issues under consideration:

This measure to . . . establish the Hells Canyon National Recreation area . . . has come about as a result of many months of hard and diligent work on the part of many concerned individuals dedicated to the goal of insuring that no dams will be built on the Middle Snake River, that this river will remain unblemished and free-flowing. The Middle Snake forms the border between the States of Idaho and Oregon, and it is particularly encouraging that the Senators from both these States are joining in wholehearted endorsement of legislation which seeks to "protect the river and surrounding lands so that generations now and in the future may take pleasure in the area's scenic wonders . . .

Hells Canyon is the scenic climax of the Snake River. Flowing through and shaping some of the most spectacular country on the continent, the big river stretches a thousand miles from Yellowstone to the Columbia for almost 200 miles along the border of Idaho and Oregon, the Snake River has carved a gorge, the deepest in North America, some claim the world. Viewed from the Oregon side at Hat Point this spectacle of canyon and mountains is one of the most impressive land forms in America — like having the Grand Tetons and the Grand Canyon all in one.

Hells Canyon is more than a freak of nature or a record-book curiosity. It is a continuum of life and land forms unique on this continent and perhaps on any other. Compressed here within a few miles are all the life zones of North America, ranging from dry desert country at river level to alpine tundra in the Seven Devils above. In wildlife the canyon is rich in both variety and quantity.

And yet Hells Canyon is also more than a simple catalog of plants and animals. It is a strange and beautiful place where ebony walls rise from a wild river, a place of steep grassy hillsides that lie brilliantly on the somber undertone of rock. Hells Canyon is a color and a quality of light that

changes with the day and the season. It is a quiet and reassuring place, and yet at times a little awesome and frightening.

Senator Packwood expressly noted the compromise necessary to achieve joint sponsorship of S. 2233 as follows:

In the 92nd Congress I introduced the Hells Canyon-Snake National River bill aimed at stopping dam construction on the river and commercial exploitation along its banks. The threat of such development was increasing daily, and the reasons for abhorring exploitation of the river and surrounding lands were easily justified . . .

Although I was able to obtain 3 days of hearings on my national river bill of the 92nd Congress, the Committee declined to take further action on what was in my view a very crucial piece of conservation legislation. The problem to a large extent was upstream water rights. My old bill did not give the protection to these water rights which others felt should be a mandatory part of any bill to designate the area. The bill now before us does. It provides that waters of the Snake River and its tributaries upstream from the boundaries of the Hells Canyon National Recreation Area shall not be restricted.

The Hells Canyon National Recreation Area Bill, S. 2233, was referred to the Senate Committee on Interior and Insular Affairs (Henry M. Jackson, Washington, Chairman) for hearings and subsequent action. As of April 1974, hearings have been suspended because of the inability of federal agencies to agree on a position to take on this legislation.

### III. FEDERAL FUNDING OF FISHERIES ENHANCEMENT PROGRAMS

**Resolution 6, Amendment of Anadromous Fish Conservation Act; and Resolution 7, Availability of Anadromous Fisji Conservation Funds:** The first of these resolutions recommended an increase in the annual authorization for support of the Anadromous Fish Conservation Act (P.L. 89-304 as amended by P.L. 91-249) to \$20 million and an increase in the federal share of projects funded under the Act from the present 50% to 75%. The second resolution recommended that the Secretary of the Interior amend his regulations to make funds allocated under the Act available for obligation through the fiscal year following the year of appropriation.

Federal agencies in the Commerce and Interior Departments sympathized with the States' desires for increased federal sharing of the costs of these projects, but pointed out that the current fiscal climate was not particularly conducive to any proposed increases in federal funding. All agencies agreed on the great value of this Federal Grant-in-Aid program, and on the importance of pressing for extension of the Act. Early in 1973, Lenor Sullivan, Chairman of the House Committee on Merchant Marine and Fisheries, introduced H.R. 6396 to extend the present Act for five years. No change in funding was proposed, but certain administrative changes were included. However, following correspondence and discussion with PMFC, Senator Ted Stevens

of Alaska introduced S. 1 620, a bill to seek the levels of support requested by Resolution 6. The Senator's introductory speech is quoted herewith, as it is of particular interest for its direct support of a PMFC recommendation:

This legislation will first permit the Federal Government to pay up to 75 per cent of the cost of projects administered by single States. Presently, the Federal Government is limited to providing 50 per cent of the costs.

Second, the amendment will permit the Federal Government to pay up to 80 per cent of the cost of programs administered jointly by several States. Presently, the Federal Government is limited to a 60 per cent share.

Third, the bill increases the annual authorization to \$20 million for fiscal year 1974.

This legislation was suggested by the Pacific Marine Fisheries Commission, an interstate compact of five Western States—Alaska, California, Idaho, Oregon, and Washington. Resolution No. 6, adopted at their November 16, 1972 annual meeting, urged this amendment because of growing pressures upon anadromous fisheries from continuing human encroachment on the environment. The member-States have continuing difficulties in raising the 50 per cent matching funds presently required under Public Law 91-249.

PMFC sent letters in support of both H.R. 6396 and S. 1620 to the Congressional committees concerned, enclosing copies of Resolution 6 and amplifying reasons for PMFC's position on that Resolution. To the House Committee, PMFC suggested that Senator Stevens' bill for increased allocations might be attached as an amendment to the House measure and offered the following comments in support of that recommendation:

Senator Stevens submitted this legislation in support of a unanimous resolution by the Pacific Marine Fisheries Commission in November 1 972 (copy attached). Our five Pacific States believe that this Anadromous Fish Conservation Program is so vital to the national interest of the nation as a whole that a larger proportional sharing of costs by the Federal Government would be appropriate. The States also have sought a larger funding authorization in order to permit expanded effectiveness of joint Federal-State activities designed to enhance fisheries productivity for the benefit of both recreational and commercial harvesters of anadromous fish species.

The national and international importance of United States anadromous fisheries is well documented by the attention directed to them in preparations for the present Law of the Sea negotiations. As you know, the official U.S. Law of the Sea position emphasizes the species approach to fisheries management, and accords special priority to the prerogatives of coastal nations for management of their anadromous fish stocks. We believe that immediate augmentation of our own anadromous fisheries programs as proposed by Senator Stevens' S. 1 620 would provide useful supportive documentation of the seriousness of our intent in this

Law of the Sea position. In addition, of course, our prime purpose in urging this augmentation is in order that we may more fully approach the productivity potential of our coastal rivers and streams, and thus partially mitigate the losses in anadromous fisheries which have followed upon development of our river systems for other purposes.

The House Committee on Merchant Marine and Fisheries held hearings on H.R. 6396 on September 17, 1973. PMFC's Executive Director testified on behalf of the Commission at those hearings. The following with minor editorial changes are excerpts from his report to PMFC's Executive Committee concerning those hearings:

H.R. 6396 would extend the Anadromous Fish Conservation Act for five years through June 30, 1978. The Bureau of Sport Fisheries and Wildlife (BSFW) has noted that the present authority includes the next fiscal year and has suggested a change to extend the authority for five years through June 30, 1979. Two important changes to the present Act in H.R. 6396 are: 1) Administration of the Act is given entirely to Interior; and 2) The language of the Act prohibits withholding of funds from obligation or expenditure, and otherwise reduces discretionary action by the Secretary of the Interior in administration of the Act.

Mr. Schmidt, Acting Director of BSFW, essentially supported extension of the Act, but opposed the changes which would forbid impoundment or withholding of funds and would require the Secretary to disburse them as authorized. Interior also proposed inclusion of language that would permit funding of sea lamprey control activities in the Great Lakes.

Congressman Leggett and other members of the Committee questioned Mr. Schmidt quite closely with respect to actual funding levels, and were critical of the fact that in past years the aid to the States has fallen considerably short of requests by the States and of the authorized amounts available. In response to questioning, Mr. Schmidt noted that from 1969 to 1973, BSFW aid to the States has been at the steady state of \$2,105,000, while requests from the States have climbed from \$2,750,000 in 1969 to \$4,170,000 in 1973. In 1974, only \$1,605,000 were allocated to the States against a request in excess of \$4 million. Administrative expenses have ranged from \$189,000 in 1969 to \$228,000 in the last two fiscal years . . .

Howard Pollock testified for NOAA-NMFS and reviewed achievements under the Anadromous Fish Conservation Act. He noted that a total of 188 projects had been approved by NMFS since the start of the program in 1967, with 148 projects completed, costing about \$21 million. He pointed out that 24 of the total projects were administered and funded jointly by Commerce and Interior. He noted that 51 % of total support has gone for research, and 41% for construction of fish production facilities, 5% for exploratory fishing, and 3% for coordination and planning. He cited a number of instances to demonstrate a high degree of effectiveness in these various programs. With re-

spect to the pending legislation, Mr. Pollock recommended continuation of dual administration of the projects by Commerce and Interior but joined Interior in opposing the anti-impoundment provisions of H.R. 6396 . . .

Congressional Committee members asked both government spokesmen questions concerning joint project proposals by the States, in order that they might take advantage of 60% funding as opposed to 50% for separate proposals. Both Interior and Commerce indicated that very few if any such proposals had been received. This clearly surprised and somewhat perplexed the Committee, which appears to be somewhat receptive to our concerns for difficulties in finding matching money, and therefore wonders why we have not taken advantage of this increased fraction of federal funding . . .

The testimony of PMFC's Executive Director was along three main lines:

First, he strongly endorsed extension of the Anadromous Fish Conservation Act, and referred to Howard Pollock's testimony which indicated the kinds of gains that have been made under the Act. He stressed the fact that anadromous fisheries are resources of national scope, being harvested extensively by fishermen from States other than those in which they are spawned, and indeed contributing to the welfare of the entire country in view of the constantly growing recreational fishery. Attention was called to the fact that many researches carried forward under the Act have very wide implications; long-term studies of logging practices and interaction with fisheries were cited as one example; projected programs for assessment of in-stream requirements of salmonids with respect to varying rates of flow were another example. He also noted PMFC's feelings that cost-benefit considerations should not be restricted to returns to commercial and sport fishing interests, but also should consider benefits to the general public, and noted the increasing public interest in viewing salmonid spawning areas, hatcheries, etc.

Second, he emphasized PMFC's support for continuing present dual administration of the Anadromous Fish Conservation Act by Commerce and Interior, and in this context noted PMFC's moving increasingly toward regional cooperative efforts in management and toward State-Federal interaction. He pointed out that the effectiveness of this trend requires that the States work cooperatively with both federal agencies, BSWF and NMFS, which have been designated by Congress as responsible for fisheries matters. Additional mention was made that many of the most pressing problems in anadromous fish management are marine in context, and require NMFS/NOAA participation.

Third, the Executive Director recommended increased funding of the Anadromous Fish Conservation Act and suggested that Senator Stevens' bill be considered as an amendment to increase the federal share of funding for reasons noted in PMFC's earlier letter.

He concluded his testimony by stating PMFC's support

of the intent of H.R. 6396 to assure full funding of the Anadromous Fish Conservation Act and to prohibit impoundment of funds. He also stated PMFC's feeling that the Act represents a mandate from Congress to undertake cooperative work for the protection and enhancement of anadromous fish which constitutes a kind of dedicated funding that should not be subject to administrative discretion in withholding full funding under the Act.

**Resolution 8, Federal Water Project Recreation Act: This resolution recommended amending the Act as follows:**

- A. Make all costs of enhancing anadromous and resident fishes at federal water developments nonreimbursable federal costs;
- B. Provide for operation and maintenance of such enhancement facilities by either federal or nonfederal bodies as may be appropriate;
- C. Remove the 5100,000 limitation that presently applies to projects authorized prior to 1965;
- D. Specifically include enhancement in areas downstream from any project but within the impact area of such project.

No definite progress on amendment was accomplished in 1973, and certain federal agencies have expressed disagreement with PMFC's position. Discussions are continuing.

### General Actions at the 1973 Annual Meeting

The Commission at its 26th annual meeting, held in Boise, Idaho on November 14 and 15, took the following actions:

1. Welcomed new Commissioners Edward G. Barber (Alaska) and Allan L. Kelly (Oregon) to their first annual PMFC meeting;
2. Confirmed appointments to the Advisory Committee of Andy Mathiesen and Bill Ray of Alaska, John P. Mulligan and Oliver F. Schulz of California, Robert G. Thomas of Idaho, Ross F. Lindstrom of Oregon, and William G. Saletic of Washington;
3. Participated in a panel discussion on "Columbia River Salmonid Fisheries — Status and Future Prospects"; See Appendix 2 for summary of the panel.
4. Received verbal reports from members of PMFC's standing committees regarding the status of fisheries; See Appendix 1 for updated reports on albacore, Dungeness crab, groundfish, shrimp, commercial troll salmon, and sport salmon and steelhead fisheries.
5. Discussed NOAA recreation programs and preparations for Law of the Sea Conference with guest speaker Phil M. Roedel, Coordinator, NOAA Marine Recreation Programs, at a luncheon on November 14;
6. Participated in a dinner discussion with participants in the Dungeness Crab Project of the State-Federal Fisheries Management Program;

7. Approved the Treasurer's report and revised budget for 1973-75 biennium; See page 26 for "Financial and Audit Reports."
8. Accepted the Executive Director's report; and
9. Confirmed actions of the Executive Committee since the 1972 annual meeting.

## 1973 Resolutions

The Advisory Committee and Scientific Staff at the annual meeting conducted final reviews and made recommendations to the Commission on each of 15 proposals before it. The Commission adopted 10 of the proposals as resolutions, voted to take no action on 1, and rejected 2. The 2 remaining proposals were withdrawn by their sponsors. The following are the original proposal numbers and the text of and the record of voting on each resolution:

### 1. Support for the United States Position at the Law of the Sea Conference for Management of Ocean Fisheries, and Other Fisheries Protection Measures

WHEREAS, the member States of the Pacific Marine Fisheries Commission have diverse fishery resources and accompanying management problems; and

WHEREAS, the fisheries include coastal, anadromous, and high seas fisheries; and

WHEREAS, use of these resources is important to the commercial, subsistence and recreational user groups; and

WHEREAS, the well-being of these fisheries stocks is important to the member States; and

WHEREAS, the Pacific Marine Fisheries Commission is aware of the total national and international problems in managing these fisheries; and

WHEREAS, the United States presented a proposal at the summer 1972 preparatory session of the Law of the Sea Conference in which a species approach to fisheries jurisdiction was advocated; and

WHEREAS, final action by the Law of the Sea Conference may be unduly delayed;

NOW, THEREFORE, BE IT RESOLVED, that the Pacific Marine Fisheries Commission endorses the species approach as proposed by the United States; and

BE IT FURTHER RESOLVED, that the Pacific Marine Fisheries Commission urges the United States government:

- a. To continue its efforts to secure a successful conclusion to the Law of the Sea Conference;
- b. To continue and increase its practice of coordination with industry in these proceedings;
- c. To take on an urgency basis whatever steps are neces-

sary, pending conclusion of the Law of the Sea Conference, to protect U.S. coastal fishery resources now being seriously damaged due to uncontrolled overfishing by foreign fleets, such steps should include, but not be limited to, full utilization of the 1958 Geneva Fisheries Convention, other conventions, bilateral agreements, and multilateral agreements; and

BE IT LASTLY RESOLVED, that copies of this resolution be forwarded to the President of the United States, the Secretaries of State, Interior, Commerce, and Defense, to members of the House Merchant Marine and Fisheries Committee, to members of the Senate Committee on Commerce, to members of the Senate Committee on Foreign Affairs, and to the Governors of all coastal States of the United States.

Adopted unanimously, in reaffirmation of their 1972 position, by the five Compact States of Alaska, California, Idaho, Oregon, and Washington

### 3. Ownership Status of U.S. Flag Fishing Vessels

WHEREAS, the Director of the National Marine Fisheries Service has requested views on an interim policy on foreign control of the fish harvesting segment of the fishing industry (*Federal Register*, October 31, 1973); and

WHEREAS, the preamble to that interim policy declaration states ". . . under present law aliens may own controlling interests in U.S. fishing companies operating U.S. documented fishing vessels"; and

WHEREAS, recent determination has cast doubt upon what has been considered a requirement that majority ownership of a U.S. flag fishing vessel can only be held by U.S. nationals or a company owned in the majority by U.S. nationals; and

WHEREAS, it is of the highest importance that every U.S. national individual or company owner of a U.S. flag fishing vessel be clearly advised of the rights and responsibilities of ownership including the means of disposing of majority ownership by sale to aliens;

NOW BE IT THEREFORE RESOLVED, that the Director of the National Marine Fisheries Service shall immediately declare the intent of its interim policy as it affects U.S. flag fishing vessel ownership by individuals who are not included in the interim policy statement, as well as by companies which are included; and

BE IT FURTHER RESOLVED, that the Director adopt a national policy with respect to any permitted majority alien ownership of U.S. flag vessels on a uniform basis rather than on a case-to-case or *ad hoc* basis;

BE IT FURTHER RESOLVED, that copies of this resolution be sent on an urgent basis to the Secretary of Commerce, the Administrator of the National Oceanic and Atmospheric Administration, the Director of the National Marine Fisheries Service, and the Administrator of the Maritime Administration in order to permit prompt replies prior to the closing date for views requested on the published interim policy.

Adopted with the States of California, Idaho, Oregon, and Washington voting for, and Alaska abstaining.

#### **4. Protection of Anadromous Fish Resources in International Waters**

WHEREAS, anadromous fish of U.S. origin are being harvested by foreign fleets in international waters by gillnets, and other net gear; and

WHEREAS, high seas netting for anadromous fish is nonselective and wasteful; and

WHEREAS, many runs of anadromous fish can no longer sustain the pressure of high seas fleets harvesting these fish; and

WHEREAS, there is international precedent for the control and subsequent elimination of netting anadromous fish on the high seas; and

WHEREAS, Government of the United States has officially taken a position to conserve and maintain the fisheries and preserve species within those fisheries for the betterment of all nations;

NOW BE IT THEREFORE RESOLVED, that the Pacific Marine Fisheries Commission urges the Government of the United States to support a ban on fishing for anadromous fish with nets in international waters;

BE IT FURTHER RESOLVED, that copies of this resolution and requests for its active support be directed to the President of the United States, the Secretaries of State, Interior, Commerce, and Defense; to PMFC cono/ressipnal delegations; to appropriate committees of both Houses of Congress; and to the Governors of all coastal States of the United States.

Adopted unanimously by the five Compact States

#### **§. "" Recommend Establishment of Coastwide Uniform Commercial Fishing Fees**

WHEREAS, the commercial fishing industry concentrated in the offshore waters of Oregoft, Washington and California harvests a renewable resource of tremendous value to these States and to the United States; and

WHEREAS, similar fishing operations are carried out beyond the jurisdiction of the several States; and

WHEREAS, the several States have promulgated rules and regulations governing the taking of these fish; and

WHEREAS, these regulations and commercial fishing fee provisions are at variance between States; and

WHEREAS, uniform and interchangeable commercial fishing fees would be desirable;

NOW BE IT THEREFORE RESOLVED, that the Pacific Marine Fisheries Commission with the cooperation of the States of Oregon, Washington and California endorses the continuing

study, by its staff, of Pacific Coast licensing structures with intent of recommending establishment of uniform fees for all commercial fishing if appropriate.

Adopted with California, Idaho, Oregon and Washington voting for, and Alaska abstaining

#### **10. Development of Fish Cultural Facility Effluent Standards**

WHEREAS, fish cultural facilities provide high quality protein for the nation and significant contributions to commercial and recreational fisheries; and

WHEREAS, state and federal agencies support maintenance of high water quality and are committed to operation of fish cultural facilities in a manner consistent with high water quality standards; and

WHEREAS, fish cultural facilities vary in design and operating efficiency and are located on rivers, streams and lakes having large differences in size, rate of flow and other characteristics influencing individual capacity to assimilate waste; and

WHEREAS, these wastes consist of silt from freshet conditions and biodegradable products of fish metabolism and unused food materials common to fish producing rivers and streams, and the major concern, therefore, is with waste volume in relation to quality and quantity of receiving waters; and

WHEREAS, when fish cultural facilities cause chemical and physical changes in receiving waters, some degree of waste treatment may be required before discharge; and

WHEREAS, rational waste water management requires that individual variations in facility construction and operation, and that impact on receiving waters be considered in determining waste treatment needs of fish cultural facilities; and

WHEREAS, the federal Environmental Protection Agency has the responsibility for and is now developing national standards for fish cultural facility effluents; and

WHEREAS, the standards adopted will have a major impact on construction and operation of fish cultural facilities throughout the United States and, therefore, upon their ability to meet public demands for fish within budgetary and other resource limitations; and

WHEREAS, fish hatcheries, fish farms and preserves are not now considered as forms of aquaculture;

NOW THEREFORE BE IT RESOLVED, that the Environmental Protection Agency consider fish hatcheries, fish farms and preserves under the provision of Section 318 (rather than under the NPDES permit program, Section 402) of Public Law 92-500 along with other aquaculture operations, and that EPA consult with representatives of state and federal fishery agencies and private fish cultural interests at regional and national levels while developing proposed standards for industrial effluents; and



BE IT FURTHER RESOLVED, that the ultimate goal be the development of standards which take into account the impact of fish cultural wastes on the receiving waters rather than only the nature of the point source discharge.

Adopted unanimously by the five Compact States

#### **11. Support Concept of Compensation for Fish Production Potential of Habitat**

WHEREAS, the rivers of the Pacific Coast historically produced numbers of spring, summer, and fall chinook salmon, coho salmon, sockeye salmon and steelhead trout commensurate with the production potential of each river and its tributaries; and

WHEREAS, the construction of dams on these river systems and their tributaries has greatly reduced the numbers of fish which reach the production areas; and

WHEREAS, for example, Dworshak Dam on the North Fork, Clearwater River was constructed at a time when the chinook salmon stocks were depressed and no compensation was realized for the loss of the salmon production potential of the North Fork; and

WHEREAS, many projects were constructed after the anadromous fish stocks of Pacific Coast rivers had been reduced by other dams; and

WHEREAS, fishery agencies, wherever opportunities are available, are now developing anadromous fish runs in production areas that are not presently producing at optimum or potential levels; and

WHEREAS, a considerable proportion of the anadromous fishery production potential of these rivers was eliminated by water development projects without just compensation, and opportunities for restoring fishery resources were denied because anadromous fish stocks at the time of project development were not at levels comparable to those which the habitats were capable of supporting;

NOW BE IT THEREFORE RESOLVED, that future mitigation of compensation goals for fishery losses resulting from water development projects be based on capability of the habitat to produce; and

BE IT FURTHER RESOLVED, that every effort be made to bring compensation measures for completed projects up to a level commensurate with the estimated production potential of the habitat affected; and

BE IT FURTHER RESOLVED, that copies of this resolution be forwarded to the U.S. Army, Corps of Engineers, U.S. Bureau of Reclamation, private power companies in the affected States, PMFC Congressional Delegations, and Governors of member States.

Adopted unanimously by the five Compact States

#### **12. Objectives for Management of Chinook and Coho Salmon Resources**

WHEREAS, the Pacific Marine Fisheries Commission's Salmon-Steelhead Committee with regulatory agency representatives from the States of Alaska, California, Idaho, Oregon and Washington has agreed unanimously that existing regulations for managing chinook and coho fisheries can be improved; and

WHEREAS, recommended objectives, which were submitted but subsequently tabled in 1972, have been reconsidered, and are to be viewed as a composite goal, all components of which must be considered in the evaluation of any comprehensive management plan; and

WHEREAS, these objectives have been endorsed in principle by the Salmon-Steelhead scientists and advisors of the Pacific Marine Fisheries Commission; and

WHEREAS, these objectives for salmon management should be espoused by the Pacific Marine Fisheries Commission in order to give more clear direction to management people;

NOW BE IT THEREFORE RESOLVED, that the Pacific Marine Fisheries Commission approves the following objectives for scientific management of all segments of the chinook and coho salmon fisheries:

- A. Recognize that the yield of the salmon fishery includes food value, dollar value, recreational value, and certain sociological values and that all of these values must be considered in the regulation and management of the fisheries;
- B. Maximize the sustained yield of chinook and coho salmon with due consideration of all of the values listed above;
- C. Maximize the poundage yield to the commercial fishery by minimizing the taking in that fishery of chinook and coho salmon having significant remaining growth potential; however, recognize that the desired yield to the sport fishery is primarily in the recreational value of the fish caught, not in pounds produced, and therefore that optimum value does not necessarily require harvesting only mature fish;
- D. Minimize undesirable genetic modifications that may arise from management practices;
- E. Recognize that biological considerations may require different management practices for different areas;
- F. Maintain optimum spawning stock escapement.

Adopted with the States of Alaska, Idaho and Oregon voting for and the States of California and Washington voting against adoption

**13. Concerning Necessity for Maintaining Position of Special Assistant for Fisheries and Wildlife to the Secretary of State**

WHEREAS, in recognition of the growing importance of fisheries considerations to the formulation of U.S. foreign policy, the United States Department of State some years ago established the position of Special Assistant for Fisheries and Wildlife to the Secretary of State; and

WHEREAS, the Special Assistant for Fisheries and Wildlife has been accorded Ambassadorial rank for purposes of international negotiations on fisheries matters for the United States; and

WHEREAS, this high level of assignment has assured the Secretary of State the most effective possible direct advice on fisheries matters, and thereby materially enhanced U.S. capabilities for development of foreign policy with full cognizance of fisheries contributions to the national welfare, and of fisheries needs and problems; and

WHEREAS, Ambassador Donald L. McKernan's notable effectiveness as chief United States negotiator on fisheries matters has been mutually enhanced by the prestige accruing to his Ambassadorial rank, and the significance accorded his high level position as Special Assistant for Fisheries and Wildlife to the Secretary of State; and

WHEREAS, the Law of the Sea negotiations and other complex fisheries-related international problems pending in the decade of the 1970's will demand the ultimate in effective fisheries advice to the Secretary of State, and the highest possible negotiating capabilities in the international arena; and

WHEREAS, U.S. fisheries interests are gravely concerned that unless certain special administrative arrangements are made, the reorganization of the U.S. Department of State under P.L. 93-126 will so down-grade the position of Department of State advisor on fisheries affairs as to render that position ineffective in its advisory responsibilities to the Secretary and therefore impotent in international negotiations; and

WHEREAS, maintenance of highest possible potential for effectiveness of the fisheries advisor is the first prerequisite for assuring both recruitment of the best possible man for this difficult and demanding job and continued support from all elements of the U.S. fishing industry;

NOW BE IT THEREFORE RESOLVED, that the Pacific Marine Fisheries Commission strongly urges the Department of State to take the necessary administrative actions to assure that the position of Special Assistant for Fisheries and Wildlife be retained; further that the Special Assistant report directly to the Office of the Secretary on policy matters regarding fish and wildlife, even though for purposes of administrative organization he may be included within the newly created Bureau of Oceans and International Environmental and Scientific Affairs; and further, that the Special Assistant to the Secretary of Fisheries and Wildlife continue to be accorded the rank of Ambassador when

engaged in international negotiations on behalf of the Government of the United States.

Adopted unanimously by the five Compact States

**14. Support for the State of Idaho Position on Reclassification and Enlargement of Idaho Primitive Area and Salmon River Breaks Primitive Area**

WHEREAS, reclassification of Primitive Area lands to Wilderness status is under study by the United States Forest Service; and

WHEREAS, upon these lands lies watershed vital to the maintenance of the aquatic habitat of much of the Salmon River drainage, and particularly, the Middle Fork of the Salmon River; and

WHEREAS, the perpetuation of runs of spring chinook salmon, summer chinook salmon, and summer steelhead will be contingent upon a suitable stream environment; and

WHEREAS, these runs of spring chinook salmon, summer chinook salmon, and summer steelhead have great economic, recreation, and social values, the benefits of which are reaped from Idaho to the Pacific Ocean; and

WHEREAS, exclusion of portions of the Big Creek drainage from Wilderness classification may prove detrimental to salmon and steelhead habitat;

NOW BE IT THEREFORE RESOLVED, that the Pacific Marine Fisheries Commission supports the position of Idaho's Governor Cecil D. Andrus for reclassification of the Idaho Primitive Area, including portions of the Big Creek drainage, and the Salmon River Breaks Primitive Area to Wilderness status; and

BE IT FURTHER RESOLVED, that this resolution be sent to appropriate members of the Congress of the United States and to the Department of Agriculture, United States Forest Service.

Adopted unanimously by the five Compact States

**15. Request for Maintenance of Fuel Supply to the United States Fishing Industry**

WHEREAS, the Pacific Marine Fisheries Commission recognizes a severe national fuel and energy crisis that could result in fuel rationing; and

WHEREAS, it is essential that the nation maintain and increase its protein producing abilities including those for protein derived from fish and fishery products; and

WHEREAS, the Pacific States collectively produce much of the essential fish protein supplied to the nation; and

WHEREAS, the fleets of the Pacific States are extremely mobile and fuel at varied sites depending on the migration patterns and availability of fish stocks; and

WHEREAS, it is vital to the nation to maintain maximum productivity in the fishing industry;

NOW BE IT THEREFORE RESOLVED, that in the development of any national plans to ration fuel the highest priority be given to meeting the fueling requirements of the fishing industry; and

BE IT FURTHER RESOLVED, that fuel for the fishing fleet be made available for the use of the fleet throughout its fishing range; and

BE IT FURTHER RESOLVED, that copies of this resolution be forwarded to the President of the United States, Secretary of the Interior, Secretary of Commerce, White House Energy Policy Office, appropriate Senate and House Committee members and to Governors of affected States.

Adopted unanimously by the five Compact States

### Election of Officers; 1974 Meeting Location

The following were elected officers for 1974: Executive Committee: Chairman — James W. Brooks, Commissioner,  
 Alaska Department of Fish and Game 1st Vice-Chairman — G. Ray Arnett, Director,  
 California Department of Fish and Game 2nd Vice-Chairman — Thor C. Tollefson, Director,  
 Washington Department of Fisheries 3rd Vice-Chairman — Thomas E. Kruse, Director,  
 Fish Commission of Oregon- • Secretary — Joseph C. Greenley, Director,  
 Idaho Fish and Game Department

Steering Group of Advisory Committee:

Overall Chairman — Jack B. Cotant, Alaska - , - Deputy Chairman — Charles A. Powell, Alaska Sectional Chairman — Robert Hetzler, California Sectional Chairman — Bjarne Nilsen, Washington Sectional Chairman — David B. Charlton, Oregon Sectional Chairman — Robert G. Thomas, Idaho

Mr. Rupert E. Andrews, Alaska Department of Fish and Game, accepted the gavel in the absence of Mr. Brooks and announced that the 1974 annual meeting would be held in Anchorage, Alaska, October 8-10 at the Anchorage Westward Hotel. Before adjourning the 1973 meeting the Commissioners thanked out-going Chairman Joe Greenley and the Staff for the excellent meeting arrangements. Special thanks were given the Idaho Fish and Game Commissioners and Department, and commendations were accorded the Idaho Power Company, Washington Department of Fisheries and the Washington Department of Game for their generosity in support of the Social Hour.

## Financial and Audit Reports

### Financial Support, 1973

The Commission receives its financial support from legislative appropriations made in accordance with Article X of the interstate Compact in which the signatory States have agreed to make available annual funds for the support of the Commission as follows: eighty percent (80%) of the annual budget is shared equally by those member States having as a boundary the Pacific Ocean; and five per cent (5%) of the annual budget is contributed by each other member State; the balance of the annual budget is shared by those member States, having as a boundary the Pacific Ocean, in proportion to the primary market value of the products of their commercial fisheries on the basis of the latest 5-year catch records.

#### TREASURER'S REPORT OF RECEIPTS AND DISBURSEMENTS November 1, 1972 to October 31, 1973

CASH BALANCE, October 31, 1972 (November 1972 Treasurer's Report)		\$53,520.47
RECEIPTS:		
Contributions by Member States:		
Alaska (Partial) .....	\$17,000.00	
California (Partial) .....	14,600.00	
Idaho FY1974 .....	4,000.00	
Oregon FY1974 .....	17,400.00	
Washington FY1974 .....	18,000.00	71,000.00
Refunds:		
California Dept., Fish & Game .....	3,591.67	
National Marine Fisheries Service .....	108,021.24	
Washington Dept., Fisheries .....	5,292.98	
1972 Annual Meeting Meals .....	1,900.50	
Postage & Insurance .....	121.34	118,927.73
Interest on Saving Certificates		1,651.53
DISBURSEMENTS:		
Annual Meeting, Nov. 1972, Portland:		
Commissioners .....	1,370.32	
Advisory Committee .....	3,043.44	
Admin. & Research Staffs .....	3,137.07	
Tape Recording & Room Rental .....	472.68	\$8,023.51
Research & Management Meetings .....		2,996.87
Salaries & Wages .....		30,028.68
Retirement & Social Security .....		1,718.71
Medical Insurance .....		361.73
Travel Expenses, unclassified .....		1,705.58
Office Supplies & Maintenance .....		1,951.11
Telephone & Telegraph .....		721.64
Postage, Freight, Express .....		1,834.73
Rent, headquarters space .....		1,960.64
Printing & Publications .....		7,279.49
Bond & Accident Insurance Premiums .....		320.08
Library Supplies .....		56.75
Capital Outlay .....		358.79
Independent Audit .....		400.00
Cooperative Research:		
California Salmon Troll .....	2,819.81	
Otolith Reader Project .....	1,290.94	4,110.75
Reimbursable Expenditures:		
Cosmo Airtel, Annual Meeting Meals .....	1,900.50	
State — Federal Relations Contracts .....	11,720.98	
Sea Grant Albacore Tuna Contract .....	57,044.59	
Federal Share of Otolith Reader, 75% .....	5,744.89	
California's Share of Troll Salmon Study .....	3,000.00	
NMFS Dungeness Crab Contract .....	7,961.16	
NMFS Sample Oregon Sport Salmon Landings .....	6,163.21	93,535.33
Other .....		73.05
Total Disbursements .....		157,437.44
CASH BALANCE, October 31, 1973		87,662.29
		<u>\$245,099.73</u> <u>\$245,099.73</u>

## Revised Biennial Budget, 1973-75

The Commission on recommendation from its Executive Committee approved revision of the 1973-75 biennial budget, adopted in 1972. Revision was an outgrowth of the Executive Committee's June 19-20 decision to make additional economies in the budget because of unexpected funding problems in several States. The revised budget, which is shown below, reduced the biennial contributions by the member States as follows: Alaska \$5,600; California \$5,300; Washington \$4,800; Oregon \$4,500; and Idaho \$1,000.

### PACIFIC MARINE FISHERIES COMMISSION Revised Biennial Budget, July 1, 1973 to June 30, 1975

ALASKA, CALIFORNIA, IDAHO, OREGON & WASHINGTON	
Salaries and Wages .....	\$ 75,656
General Operations and Maintenance:	
Office Supplies .....	4,600
Telephone and Telegraph .....	1,300
Postage, Freight, Express .....	2,200
Rent, Office .....	4,646
Premiums, Bonds, Insurance .....	587
Audit Fees .....	750
Private Car Mileage .....	600
Fares, Plane, R.R., Bus, Other .....	4,400
Meals and Lodging .....	2,200
Library Supplies .....	200
Social Security .....	3,320
Retirement Annuity .....	3,948
Medical and Hospital Insurance .....	982
Miscellaneous .....	356
Annual, Research and Executive Committee Meetings:	
Advisory Committee, Travel, etc. ....	15,651
Commissioners, Travel, etc. ....	7,826
Research & Management, Travel, etc. ....	13,947
Administrative Staff, Travel expense ..	3,125
Meeting Rooms, Steno, Sound & Record ..	900
Spring and Special Meetings:	
Executive Committee, Travel, etc. ....	1,200
Research Directors, Travel, etc. ....	1,800
Special Research, Travel, etc. ....	5,000
Publications:	
Annual Reports Nos. 26 and 27 .....	5,000
Bulletins .....	3,400
Data Series .....	900
Cooperative Research & Management .....	10,900
Capital Outlay:	
Office Furniture & Equipment .....	1,000
Total Estimate .....	<u>\$176,394</u>
Source of Financing:	
Savings from Previous Biennium .....	\$15,204
Interest Income .....	4,000
Returned Pension Plan Contribution .....	3,874
External Contract Income .....	12,500
State Contributions .....	140,816
	<u>\$176,394</u>

#### PROPORTIONATE CONTRIBUTIONS BASED ON TOTAL BIENNIAL CONTRIBUTIONS OF \$141,200

Member	5-Year Average*	% of Con-tribution	Biennial Contribution
Alaska	\$ 75,820,094	26	\$ 37,200
California	61,712,830	25	35,500
Washington	25,120,491	22	31,200
Oregon	17,013,833	22	30,300
Idaho	Insignificant	5	7,000
		100	\$141,200

\*Annual value of catch, 1966-1970 inclusive.

## Audit Report

ADAMS, RAYMOND & CO.  
Certified Public Accountants  
Portland, Oregon

September 24, 1973

The Board of Commissioners Pacific  
Marine Fisheries Commission State  
Office Building Portland, Oregon  
97201

Gentlemen:

We have examined the balance sheet of Pacific Marine Fisheries Commission as of June 30, 1973, and the related statements of revenues and expenditures, fund balances, and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned financial statements present fairly the financial position of Pacific Marine Fisheries Commission at June 30, 1973, and the results of its operations and the changes in its financial condition for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Yours truly,  
ADAMS, RAYMOND & CO.

### Balance Sheet, June 30, 1973

ASSETS:	General Fund	Property Fund
Cash on Hand and in Bank .....	\$6,129.27	
Certificate of Deposit .....	6,000.00	
Due from U.S. Dept., Commerce, National Marine Fisheries Service .....	10,037.34	
Due from California Department of Fish and Game .....	1,442.28	
Due from Washington Dept., Fisheries .....	1,399.02	
Office Furniture and Equipment ..		\$6,051.78
Total Assets .....	<u>25,007.91</u>	<u>6,051.78</u>
LIABILITIES:		
Accounts Payable .....	\$6,010.32	
U.S. Department of Commerce Unexpended Sea Grant Funds ..	225.82	\$---
Total Liabilities .....	<u>\$6,236.14</u>	
FUND BALANCES:		
Unappropriated Surplus .....	18,771.77	
Investment in Fixed Assets .....		\$6,051.78
Total Liabilities & Fund Balances .....	<u>\$25,007.91</u>	<u>\$6,051.78</u>

# Appendix 1 — Status Reports

## Status of the 1973 Pacific Coast Albacore Fishery<sup>1</sup>

Only about 37 million pounds of albacore were landed in the Pacific Coast States during 1973 (Figure 1). This is considerably below the 25-year average of 46 million pounds (Table 1). During the 1973 season, most of the albacore fleet operated in the northern part of the fishing grounds and about 80% of the catch was landed north of California.

This year the American Fishermen's Research Foundation (AFRF) again chartered a number of fishing vessels for preseason scouting and tagging. The first fish were caught in mid-May and fishable concentrations of albacore were found 1,000-1,500 miles west of San Diego. Over 1,500 albacore were tagged but recoveries were very few and were from boats fishing off Morro Bay late in the season. As in 1972, the charter boats were unable to follow the fish as they moved to nearshore grounds.

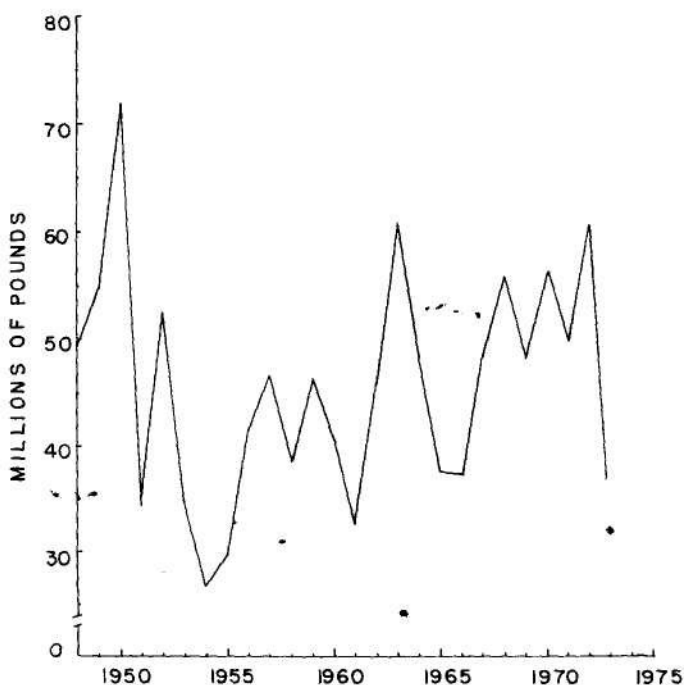


FIGURE 1. Combined annual landings of albacore in California, Oregon and Washington through 1973.

### Washington

Due to slow warming of waters off Washington, fishing did not get underway until late in July and for the most part was centered off Vancouver Island and Cape Flattery. By September, the jig boats had moved south and bait boats which were fishing off Gray's Harbor were catching up to 11 tons per day. Early cooling of nearshore waters sent most of the boats south by the first week of October, but the total landings in Washington exceeded 13 million pounds for the season.

### Oregon

Albacore fishing off Oregon started later than usual with only small, spotty catches occurring until the last 3 or 4 days of June. Average catches of 10 to 30 fish per day were scattered all along the coast until the last week of July. On July 29, one boat reported catching nearly 400 fish about 60 miles off Cascade Head and the fleet averaged 100 fish per boat per day from Newport to the Columbia River for the rest of the month. July landings were about 96,180 pounds.

August landings totalled 10.1 million pounds and the catches were spread from Cape Blanco to the Columbia River with high boats scoring from 100 to 520 fish per day but the fleet average was near 100 fish per boat day. During the first two weeks of August the best fishing was off Coos Bay and from Cascade Head to the Columbia River Dumping Grounds. The center of fishing then moved offshore from the Dumping Grounds and boat scores of up to 400 fish per day were made about 200 miles offshore during the third week of August. About the same time, fishing improved 30 to 80 miles offshore from the Umpqua River, and by the last week of August the best fishing was 50 to 100 miles offshore from Newport with individual boat scores up to 400 fish per day.

September landings were 5.5 million pounds. Stormy periods during the first and third weeks of September forced most boats into port. The jig fishery declined during the month and the boats were scattered from Astoria to Brookings with the best fishing occurring off the Columbia River, Newport and Coos Bay. Catches per jig boat generally exceeded 100 fish per day as the month began but decreased as the month progressed. Bait fishing was very good during the second week of September in the vicinity of the Columbia River with up to 11 tons per day being caught by some boats. Bait fishing continued good through the remainder of the month but at a slower rate, with catches up to 7 tons per day reported.

During the first week of October the catches dropped off and most boats either went south to California or quit for the season. There was some fishing off Oregon but catches were very small and spotty. A series of storms seemed to end the Oregon season about the third week of October. Landings for October were about 656,225 pounds and brought the season's total for Oregon to 16.3 million pounds.

Length frequency samples of albacore caught off Oregon, Washington and British Columbia and landed in Oregon during the season had a consistent bimodal distribution with a 63-cm mode strongly predominant and a 73- to 75-cm mode much less prominent.

<sup>1</sup> This is a revision of the status report presented at the 26th Annual PMFC Meeting, Boise, Idaho, November 13-15, 1973.

## California

No landings in California were reported in June, but the first fish were caught in late June over the sea valleys off Cape Mendocino.

July saw fish off Point Conception and Cape Mendocino but only 51,000 pounds were landed. Very little fishing occurred due to poor weather and price negotiations. Most of the boats that did not move north to Oregon switched to salmon fishing off central California.

Early August was marked by poor weather and low effort. After a price settlement on August 14 of \$830 per ton, at the cannery, the few boats left off Point Conception, California experienced fair fishing. Sportfishing was centered off Point Conception also, and most anglers caught as many 20- to 40-pound fish as they could carry home. Although many fish were sighted all along the California coast during August, there were too few boats to find the major concentration of fish. Only slightly more than 350,000 pounds were landed in August.

Fishing effort increased greatly in September due to boats returning to California from northern waters and to boats leaving the salmon fishery. Boats returning southward found good fish-

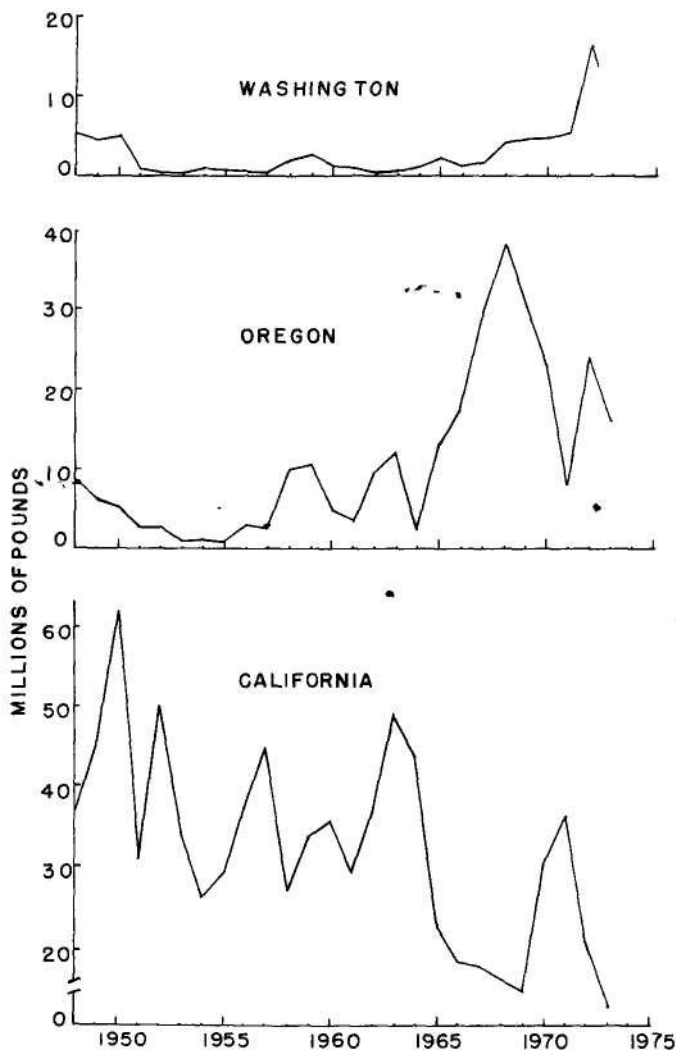


FIGURE 2. Annual albacore landings by State, 1948-1973.

ing over the Gorda Sea Valley, and they stayed with the fish until blown into port. Fishing between Morro Bay and the "1908 Spot" southwest of Point Conception remained good till the end of September. During one week the Loran station at Point Arguello was shut down during daytime and fishermen, after drifting all night, reported difficulty in returning to the good fishing spots. Landings for September reached 3 million pounds.

In October many boats brought their last loads into port for the season. Only fair catches were made by those boats that remained off Morro Bay. Final bait-boat landings carried the October total over 3.5 million pounds. Landings in November totalled 300,000 pounds and brought the season's final total to 7.2 million pounds.

TABLE 1. Albacore landings in California, Oregon and Washington (in 1,000's of lbs.)

Year	California	Oregon	Washington	Total
1948	36,456	8,004	4,917	49,377
1949	44,006	6,457	4,434	54,897
1950	61,745	5,386	5,035	72,166
1951	30,915	2,917	625	34,457
1952	49,804	2,586	177	52,567
1953	33,836	776	89	34,701
1954	26,107	469	421	26,997
1955	29,002	503	233	29,738
1956	37,055	3,654	630	41,339
1957	43,525	2,702	433	46,660
1958	27,188	9,754	1,503	38,445
1959	32,740	10,582	2,961	46,283
1960	35,113	4,563	526	40,202
1961	29,123	3,251	456	32,830
1962	36,622	8,936	365	45,923
1963	48,860	11,413	527	60,800
1964	42,551	4,452	1,055	48,058
1965	23,218	12,122	2,048	37,388
1966	18,189	18,041	1,101	37,331
1967	17,858	29,243	1,240	48,341
1968	15,077	37,752	3,050	55,879
1969	14,722	29,828	3,561	48,111
1970	29,932	21,779	4,390	56,101
1971	36,082	8,420	5,250	49,752
1972	21,000	23,056	16,238	60,294
Average	32,829	10,666	2,451	45,946
1973 <sup>1</sup>	7,200	16,350	13,000	36,550

<sup>1</sup> Preliminary

## Status

The albacore fishery in the eastern North Pacific Ocean depends upon an annual migration, and its catches are subject to wide fluctuations (Figure 2). Although large concentrations of fish were seen off California, most boats moved to the north-

em grounds following preseason predictions and little effort was made to exploit early season California schools. The coastwide total catch of less than 37 million pounds does not necessarily reflect the abundance of albacore off the American West Coast and the resource continues to appear healthy.

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## Status of the 1973 Pacific Coast Shrimp Fishery

The 1973 pandalid shrimp landings for the West Coast of the United States and Canada reached a record high of about 153.2 million pounds. Alaska landings accounted for most of the increase. They totalled 119.6 million pounds, about 24.7 million pounds more than the 1971 record and around 38.3 million pounds more than 1972. Oregon landings set a new record with the final catch approaching 24.2 million pounds. Washington landings were up sharply, totalling 6.5 million pounds. British Columbia landings increased over 1972, reaching 1.7 million pounds. California landings of around 1.2 million pounds were about half that of 1972.

### California

Ocean shrimp, *Pandalus jordani*, landings in California were slightly over 1.2 million pounds by the end of the season (October 31) and were down 1.3 million pounds from last year's total of 2.5 million pounds.

For the third year in a row, landings from Area A (Crescent City-Eureka; PMFC Area 92) fell short of the quota. Landings totalled 979,000 pounds and were considerably less than the 3.2 million-pound quota. The 1973 season opened April 16 with the price to the fishermen 16 cents per pound. A 2-day strike in mid-May resulted in a price increase to 18 cents. Bad weather, unusually strong and prolonged ocean upwelling, and good fishing off Oregon combined to keep catch and effort down off California from April through June. Fishing improved during July when 10 vessels landed 600,000 pounds at an average catch rate of 640 pounds per hour. Most of this catch came from a relatively small area off the Klamath River. The price was increased to 20 cents per pound on August 5, but catches declined by mid-August and most fishermen returned to Oregon. Less than 20,000 pounds were landed from mid-August through October.

Landings from Area B-1 (Ft. Bragg; PMFC Area 94) totalled only 3,410 pounds this year. Two vessels made 25 tows during June but were unable to find shrimp in commercial quantity. Landings totalled over 103,000 pounds in 1972.

Landings from Area B-2 (Bodega Bay; PMFC Area 96) totalled 246,031 pounds compared to last season's 213,000 pounds. Two vessels fished from April 16 to May 23. Fishing was excellent with the catch rate for the season averaging a record 2,723 pounds per hour. The area was closed May 23 with the fishermen unable to reach the quota of 250,000 pounds because of rough seas on May 22 and 23. Fishing took place on a small, dense school off the Russian River in 34 to 44 fathoms of water.

Only 110 pounds were landed in Area C (Morro Bay-Avila; PMFC Area 98). The one vessel that fished was unable to find shrimp in commercial quantity. No landings were reported in this area in either 1971 or 1972.

With respect to stock status, it appears the trend of even-year class dominance that has held in the Area A population since 1964 may be reversing. The 1972-year class, expected to be strong and to support the fishery during 1973 and 1974, made up only one-third to one-half of the catch during the season. The 1973-year class, expected to be relatively weak, was found in Pacific hake stomachs and in shrimp fishermen's nets in large numbers from early July on. If this year class is as strong as it appears, Area A could support a reasonably good fishery in 1974. If, on the other hand, recruitment of the 1973-year class is not strong, Area A will have produced three weak year classes in a row, and the outlook for the 1974 season will be poor. Strong recruitment from the 1973-year class and subsequent year classes is needed in the remaining areas for the resource to become more productive.

### Oregon

Shrimp fishermen landed in Oregon a record ocean shrimp catch of 24.2 million pounds. The previous record, established in the 1972 season, was 20.9 million pounds. Even though the 1973 season opened a month later (April 1), record prices spurred effort, which, combined with a substantial shrimp stock, added up to a record year. A strong 1970-year class contributed to good catches of large shrimp of excellent grade.

About 1.5 million pounds of the April-August landings in Oregon were taken off Washington (PMFC Area 74) and 1,200 pounds were taken off California (PMFC Area 92). About 10.0 million pounds (a new record) were taken off Coos Bay (Area 86). Northern Oregon (PMFC Areas 82 and 84) contributed 9.1 million pounds (also a new record) and southern Oregon (PMFC Area 88) south of Cape Blanco contributed about 2.4 million pounds. The total Oregon shrimp landings approached 24.2 million pounds by the closing date of October 16, 1973.

### Washington

The Washington ocean shrimp fishery started with a few landings in February. With good catches off Grays Harbor (PMFC Area 74) and increased effort, the total 1972 catch of 1.5 million pounds was exceeded by mid-May and the Washington fleet went on to land just under 5.3 million pounds. This is second only to 1958 when 6.5 million pounds were landed and is more than three times the 1972 landings. The catch rate

was close to the record rate of 1972. Thus, the high catch has resulted from continued excellent fishing plus a larger, more efficient fleet. The "regular" 1973 fleet was composed of 9 double-rigs and 2 single-rigs. In comparison, the 1972 fleet consisted of 2 double-rigs and 4 single-rigs.

Logbook data indicate that about 95 percent of the catch of the Washington fleet, or about 5 million pounds was caught in the Grays Harbor statistical area. An additional 1.5 million pounds was caught by Oregon vessels and landed in Oregon, which brings the combined catch from this area to 6.5 million pounds. The previous high catch was 4.2 million pounds for Washington and Oregon vessels in 1958. Washington vessels landed approximately 1,76,000 pounds from the Oregon coast. The Destruction Island area (PMFC Area 72) again failed to produce significantly as it has failed since 1970.

Biological samples showed that the 1970-year class contributed the bulk of the 1973 poundage and that the 1971-year class was an apparent failure. The 1972-year class showed well in samples after June and comprised about one-third of the catch by number.

### British Columbia

Pandalid shrimp landings (all species combined) in British Columbia during 1973 were 1,729,000 pounds, an increase of 935,000 pounds over 1972. New trawl grounds off Tofino Inlet, (PMFC Area 66) yielded the greater part of the catch. One peeler machine is now operating at Tofino. All trawl vessels continue to use single-rig gear. Pot fishing for "prawn" or spot shrimp, *Pandalus platyceros*, accounted for about 16 percent of the total catch.

### Alaska

Alaska landings, primarily northern shrimp, *Pandalus borealis*, reached a record high of 119.6 million pounds, exceeding the 1972 catch of 81.3 million pounds by 38.3 million pounds and the record 1971 catch of 94.9 million pounds by 24.7 million pounds. Most of this increase was attributable to the

development of grounds in the Chignik area of the Alaska Peninsula (PMFC Area 55). Landings from this area totalled 24.9 million pounds, 20.9 million pounds above the previous high of 4 million pounds in 1972. Record prices paid to trawlers, ranging from 5.25 cents to over 8.0 cents per pound, and a shorter season in the Kodiak area were primary reasons for the increased effort in this area. Effort has also increased in the Shumagin Island region of the Alaska Peninsula and landings reached 18.5 million pounds, or about 6 million pounds more than in 1972. A new fishery occurred in the Unalaska region of the Aleutian Islands with landings totalling 456,000 pounds. Kodiak area landings (PMFC Area 54) reached 70.5 million pounds, an increase of 12.2 million pounds over 1972. Other landings are estimated at 4.1 million pounds for Cook Inlet (PMFC Area 53) and 700,000 pounds for the southeastern region (PMFC Area 51).

The new Kodiak season extends from August through February, with a 55 million-pound quota. The Alaska Peninsula-Chignik area seasons are April 15 through February 14. Kodiak otter trawl catch rates this season averaged 4,038 pounds per hour for all vessels compared to 3,300 pounds per hour in 1972. Although the total number of otter trawlers fishing Kodiak has declined to 30 from last year's 47, the number of double-rigs fishing in 1973 doubled to 14. Beam trawlers increased to 26 vessels but landed only 3.0 million pounds. Commercial catch samples from the Kodiak area have indicated that the 1969- and 1971-year classes were stronger than those of 1968 and 1970 at comparable ages. Although the presence of the weak 1968-year class is still being felt, 1973 is the last season of significant contribution by this year class prior to its natural departure from the fishery. Chignik and Alaska Peninsula areas experienced catch rates comparable to Kodiak. The size of the fleet based in this area has increased to 12 vessels.

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TABLE 1. Annual shrimp landings and previous 10-year means in pounds by region, 1963-1973

Year	Alaska	British Columbia	Washington	Oregon	California	Total
1963	15,126,950	1,788,000	956,105	3,114,700	2,095,278	23,081,033
1964	7,726,750	1,052,000	314,130	5,477,400	980,608	15,550,888
1965	16,818,941	1,755,000	23,468	1,748,000	1,425,875	21,771,284
1966	28,192,621	1,682,000	282,947	4,751,300	1,213,959	36,122,827
1967	41,812,600	1,696,000	1,028,744	10,373,956	1,404,821	56,316,121
1968	42,023,100	1,568,000	1,163,864	10,976,258	2,223,205	57,954,427
1969	47,850,600	2,118,700	1,425,286	10,477,945	2,951,800	64,824,331
1970	74,256,300	1,537,800	925,000	13,735,000	4,044,640	94,498,740
1971	94,891,300	735,000	678,000	9,291,000	3,074,000	108,669,300
1972	81,262,000	794,000	1,582,000	20,900,000	2,500,000	107,038,000
Mean	44,996,000	1,473,000	838,000	9,085,000	2,191,000	58,583,000
1973	119,600,000	1,700,000	6,500,000	24,200,000	1,200,000	153,200,000



# Status of the 1973 Pacific Coast Groundfishery<sup>1</sup>

## TRAWL LANDINGS

Pacific Coast trawl landings of groundfish by American and Canadian fishermen in 1973 totalled 153 million pounds, down 3% from 1972 landings of 159 million pounds (Figure 1). American catches totalled 115 million pounds and Canadian catches 39 million pounds, both totals were slightly lower than in 1972 (Table 1).

In Alaska, as in past years groundfish landings by domestic trawl gear were negligible although large catches were made by distant-water foreign trawl fleets. California trawlers responded to high market demand by landing a record 55 million pounds.<sup>2</sup> Market conditions were also good in Washington and Oregon and landings were 40 and 19 million pounds, respectively. Processors in Oregon had some problems with supply, due to decreased abundance of Dover sole and the shifting of many vessels to the coastal shrimp fishery. British Columbia landings decreased 7% to 39 million pounds in 1973.

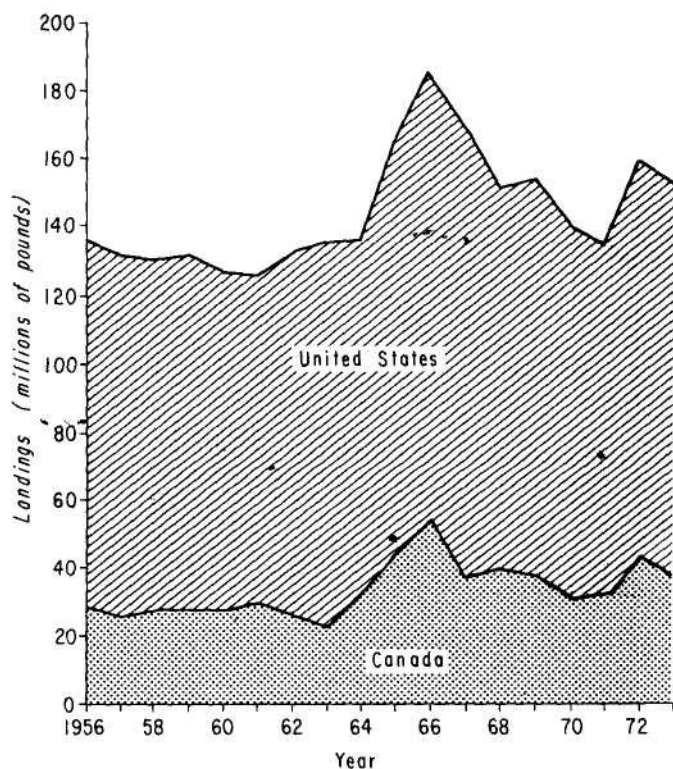


FIGURE 1. Pacific Coast trawl landings of the United States and Canada.

<sup>1</sup>Except halibut fishery which is under the jurisdiction of the International Pacific Halibut Commission. Beginning in 1972 this report was expanded to include groundfish catches by longlines and pots.

California landings for 1973 are preliminary.

TABLE 1. Trawl landings in 1,000's of lbs., for all purposes by region: 1972 vs. 1973 and 10-year mean (1963-1972 incl.)

Region*	1972	1973	% change	10-year mean
Washington	42,071	40,447	-4	53,961
Oregon	20,924	19,271	-8	24,436
California	54,101	55,200	+2	37,152
Total U.S.	117,096	114,918	-2	115,549
British Columbia	41,692	38,581	-7	37,242
Total (U.S.-Can.)	158,788	153,499	-3	152,791

\*Landings in Alaska have been negligible

Figure 2 shows the landing trends of the most important foodfish species comprising the trawl catch by American and Canadian fishermen. A brief summary by species follows.

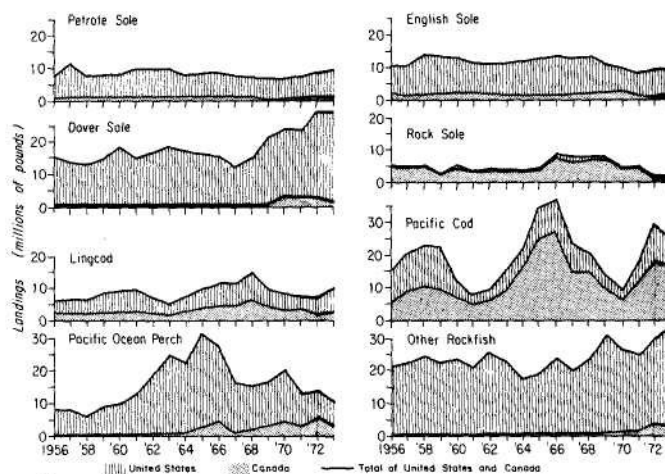


FIGURE 2. Pacific Coast trawl landings by major species or group.

### Petrale Sole (*Eopsetta jordani*)

Petrale sole landings in 1973 were 8.9 million pounds, up slightly from 1972 (Table 2). While landings in Oregon and California remained about the same or slightly lower than in 1972, Washington landings were 2.2 million pounds, up 29%. In contrast British Columbia landings were only 1.0 million pounds, down 18%. The decline in Canadian catches has been attributed to passage of recent strong-year classes through the fishery.

### English Sole (*Parophrys vetulus*)

English sole landings in 1973 were 9.8 million pounds, up 20% over 1972 (Table 2). Very substantial increases occurred in British Columbia and Washington and to a lesser extent in Oregon. Catches in California in 1973 were about the same as in 1972. Although overall landings in 1973 were up sharply, they represent only a return to levels of past years.

TABLE 2. Trawl landings in 1,000's of lbs., for food by region, 1972 vs 1973 and 10-year mean (1963-1972)

Species or group	Wash.	Oreg.	Calif.	Total U.S.*	British Columbia	Total U.S. & Canada
<b>Petrale sole</b>						
1972	1,726	2,185	3,574	7,485	1,275	8,760
1973	2,223	2,182	3,500	7,905	1,044	8,949
% chge. '72-'73	+29	0	-2	+6	-18	+2
10-year mean	1,902	1,972	3,087	6,961	981	7,942
<b>English sole</b>						
1972	1,826	2,196	3,002	7,024	1,084	8,108
1973	2,666	2,364	3,100	8,130	1,630	9,760
% chge. '72-'73	+46	+8	+3	+16	+50	+20
10-year mean	2,875	2,093	4,326	9,294	1,595	10,889
<b>Dover sole</b>						
1972	1,192	5,942	22,080	29,214	2,424	31,638
1973	1,247	4,394	22,500	28,141	1,830	29,971
% chge. '72-'73	+5	-26	+2	-4	-25	-5
10-year mean	1,612	4,846	12,023	18,481	1,164	19,645
<b>Rock sole</b>						
1972	555	2	5	562	2,110	2,672
1973	838	1	3	842	1,789	2,631
% chge. '72-'73	+51	—	-40	+50	-15	-2
10-year mean	944	24	1	969	4,535	5,504
<b>Pacific cod</b>						
1972	9,304	1,069	—	10,373	19,013	29,386
1973	7,732	452	—	8,184	16,453	24,637
% chge. '72-'73	-17	-58	—	-21	-13	-16
10-year mean	6,715	358	—	7,073	15,116	22,189
<b>Lingcod</b>						
1972	1,482	1,349	2,618	5,449	2,288	7,737
1973	1,734	2,004	3,000	6,738	2,655	9,393
% chge. '72-'73	+17	+49	+13	+24	+16	+21
10-year mean	3,692	1,033	1,080	5,805	3,593	9,398
<b>Pac. ocean perch</b>						
1972	8,685	602	94	9,381	5,130	14,511
1973	6,392	539	94	7,025	3,082	10,107
% chge. '72-'73	-26	-10	0	-25	-40	-30
10-year mean	12,624	4,384	54	17,062	2,915	19,977
<b>Other rockfish</b>						
1972	10,678	4,057	13,160	27,895	3,393	31,288
1973	11,607	3,572	17,000	32,179	2,681	34,860
% chge. '72-'73	+9	-12	+23	+15	-21	+11
10-year mean	9,642	4,241	8,721	22,604	1,119	23,723

\*Landings in Alaska have been negligible

### Dover Sole (*Microstomus pacificus*)

Dover sole landings in 1973 were 30 million pounds, down slightly from 1972 (Table 2). The major fishery for Dover sole occurs off California. Landings there were about 23 million pounds and nearly equalled 1972's total. Catches off Oregon decreased considerably in 1973 due to a combination of factors involving passage of strong-year class, previous cropping of near-virgin stocks off Coos Bay and possible effects of foreign trawl fleets. Landings in Washington were 1.2 million pounds,

a 5% increase over 1972. Landings in British Columbia were reduced 25% because of decreased Canadian fishing effort for Dover sole.

### Rock Sole (*Lepidopsetta bilineata*)

Rock sole landings in 1973 were 2.6 million pounds, virtually the same as in 1972 (Table 2). However, this is substantially below the 10-year mean of 5.5 million pounds. Washington landings of rock sole which account for virtually all of the

United States catch were up 51% to 838,000 pounds. British Columbia landings were down slightly to 1.8 million pounds.

### Pacific Cod (*Gadus macrocephalus*)

Pacific cod landings in 1973 were 25 million pounds, down 16% from 1972 (Table 2). Landings in Washington and Oregon were down 21% to 8.2 million pounds. British Columbia fishermen account for the bulk of the Pacific cod catch. They landed 16.5 million pounds, down about 13% due to reduced catches off the west coast of Vancouver Island.

### Lingcod (*Ophiodon elongatus*)

Lingcod landings in 1973 were 9.4 million pounds, up 21% from 1972 (Table 2). They were up 17% and 49%, respectively, in Washington and Oregon. California landings continued good with 3.0 million pounds landed, 13% higher than in 1972. British Columbia landings were 2.7 million pounds, up 16% from 1972.

### Pacific Ocean Perch (*Sebastes alutus*)

Pacific ocean perch landings in 1973 were 10.1 million pounds, down 30% from 1972 (Table 2). The 1973 total is substantially below the 10-year mean of 20 million pounds. There were substantial decreases in landings in all regions, except California where Pacific ocean perch are unimportant. Washington and Oregon landings decreased 26% and 10%, respectively, while British Columbia landings were down 40%.

### Other Rockfish (*Sebastes* and *Sebastes* species)

The "other rockfish" category comprises all rockfish species other than Pacific ocean perch. Landings of "other rockfish" in 1973 were 34.9 million pounds, up 11% from 1972 (Table 2). United States catches of rockfish were up along the entire coast with the exception of Oregon where 1973 landings were down 12% from 1972. A recent trend toward sharply increasing rockfish landings in British Columbia ended in 1973 with landings declining to 2.7 million pounds.

## LONGLINE LANDINGS

Longline statistics for 1972 are discussed instead of those for 1973, as longline data for the current year are seldom available from all agencies at the time this report is prepared annually. Longline catches of groundfish species (excluding halibut) by American and Canadian fishermen in 1972 totalled 9 million pounds (Table 3). The American portion of this catch equalled 7.6 million pounds, the bulk of which was landed in California. Sablefish, rockfish and to a lesser extent lingcod were the major species contributing to the catch.

British Columbia longline catches amounted to 1.5 million pounds, including 915,000 pounds of sablefish. A significant portion of the sablefish and rockfish catches by fishermen of both countries are landed incidental to the halibut fishery.

TABLE 3. Longline landings by major species in 1972 (1,000's of lbs.)

Region	Sable-fish	Lingcod	Rock-fish	Other species	Total
Alaska	1,352	59	238	—	1,649
Washington	184	24	40	3	251
Oregon	9	5	6	1	21
California	2,611	628	2,428	—	5,667
Total U.S.	4,156	716	2,712	4	7,588
British Columbia	915*	259	210	75	1,459
U.S. + Canada	5,071	975	2,922	79	9,047

\*Includes handline, troll and pot catches

## POT LANDINGS

Groundfish landings by a very small pot-gear fishery off the Pacific Coast of the United States and Canada, with the primary effort centered in California, totalled 1.1 million pounds in 1972; statistics for 1973 are still unavailable. American fishermen accounted for 97.4% of the 1972 catch (Table 4). Sablefish is the major species harvested by pot gear.

TABLE 4. Pot landings by major species in 1972 (1,000's of lbs.)

Region	Sable-fish	Lingcod	Rock-fish	Other species	Total
Alaska	259	—	—	—	259
Washington	—	—	—	—	—
Oregon	3	—	—	—	3
California	778	—	10	—	788
Total U.S.	1,040	—	10	—	1,050
British Columbia	—	1	3	24	28
U.S. + Canada	1,040	1	13	24	1,078

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## Status of the 1972-73 Pacific Coast Dungeness Crab Fishery

The 1972-73 season's Dungeness crab landings, excluding Canada, totalled 15.2 million pounds (Figure 1), the poorest landings ever reported for the four Pacific coast states. This is 19.9 million pounds less than the 15-year mean of 35.1 million pounds and represents a 9.9 million-pound decrease from the 1971-72 season. Landings for Washington, Oregon, and California totalled 8.9 million pounds or 6.6 million pounds less than were landed during the 1971-72 season. The 1972-73 season is the poorest on record for the three contiguous states.

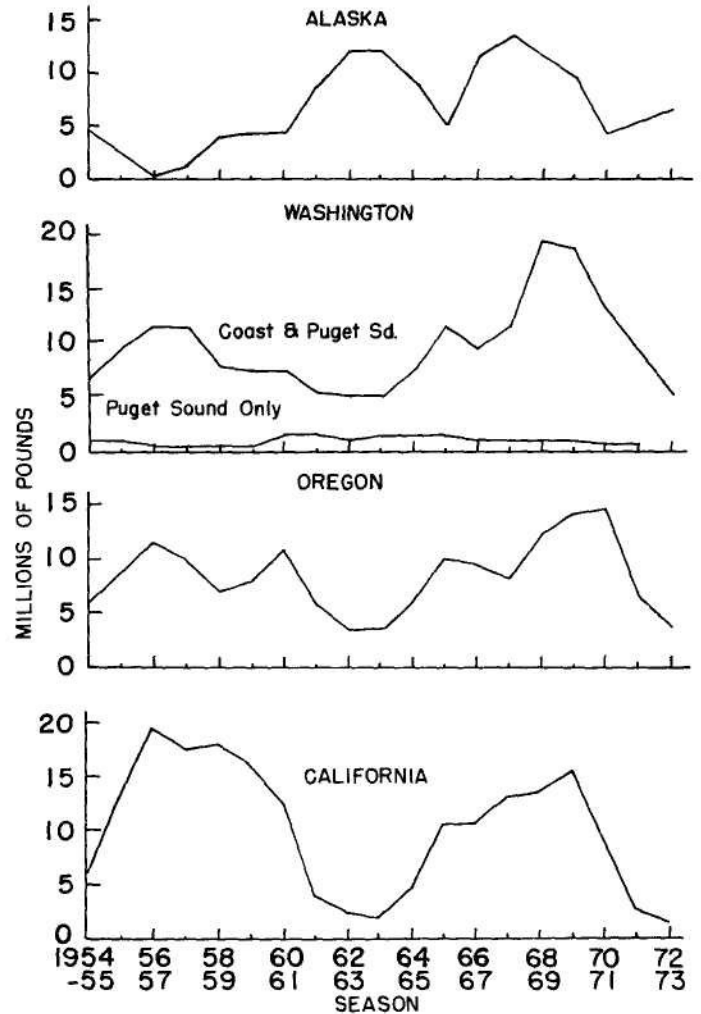


FIGURE 2. Dungeness crab landings by season, 1954-55 through 1972-73, except Alaskan seasons are calendar years, i.e., 1954-55 = 1955.

60 -

### Alaska

Landings in Alaska were 6.3 million pounds or 1.0 million pounds more than in 1972 (Figure 2). Abundance of legal male crabs remains low in most Alaskan areas.

### British Columbia

Dungeness crab landings in British Columbia<sup>1</sup> were 2.6 million pounds, an increase of 600,000 pounds compared to 1972.

### Washington

Coastal landings of crab in Washington were slightly over 4.3 million pounds (Figure 2) or 4.9 million pounds less than in 1971-72. The Washington season opened December 1, 1972 because good market quality crabs were available at that time. The Puget Sound crab season opened October 1, 1972 and catches totalled 1.2 million pounds which is the highest since 1965-66.

### Oregon

Oregon crab landings totalled 3.1 million pounds (Figure 2). This represents a decrease of 3.7 million pounds from the 1971-72 season and is the lowest Oregon total recorded for this species by 400,000 pounds.

<sup>1</sup> Alaska and British Columbia data are reported by calendar year.

### California

Landings in California totalled 1.5 million pounds, the lowest since the 1936-37 season. This is a decrease of 1.4 million pounds from the 1971-72 season. The California Legislature passed a bill extending the crab season through August 31. This legislation will remain in effect through the 1973-74 season. Less than 15,000 pounds of crab were landed during the extension period of July 16 to August 31. Landings in the San Francisco area have continued to decrease. The 1972-73 total of 292,000 pounds was 28,000 less than the 1971-72 catch, the poorest ever reported for this area.

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ERROR: stackunderflow  
OFFENDING COMMAND: ~

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